

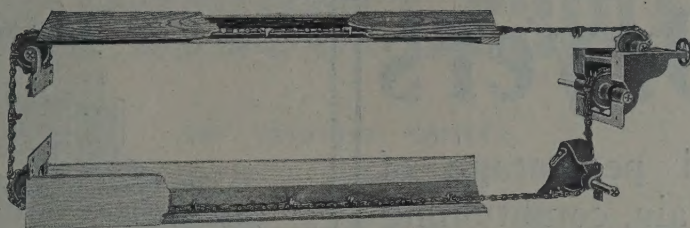
Chain Drag Feeders

The most satisfactory way of conveying all kinds of grain and using our Cast Iron Bottom, made to fit the chain, the drag can be used for all kinds of grain without mixing, as the chain cleans bottom of drag thoroughly.

These drags only require four upright timbers to support Sprockets, Rake Off and Head Tightener.

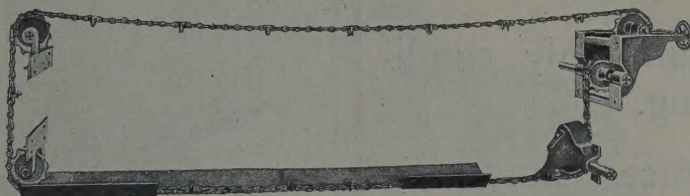
The Rake Off being adjustable to any incline of the chain, the timbers to support same are always perpendicular.

STYLE A



Chain Drag Feeders for Conveying all kinds of Grain from Dumps or Cribs to Sheller or Elevators.

STYLE B



Patent Applied For

Send for our Catalogue and Prices.

Style A

DRAG consists of bottom box with Cast Iron Lining. Return box with wrought iron track, all necessary Sprockets, Rake Off, Tightener Head and Sprockets and Shafts.

All Iron Bearings with Oil Holes.

Style B

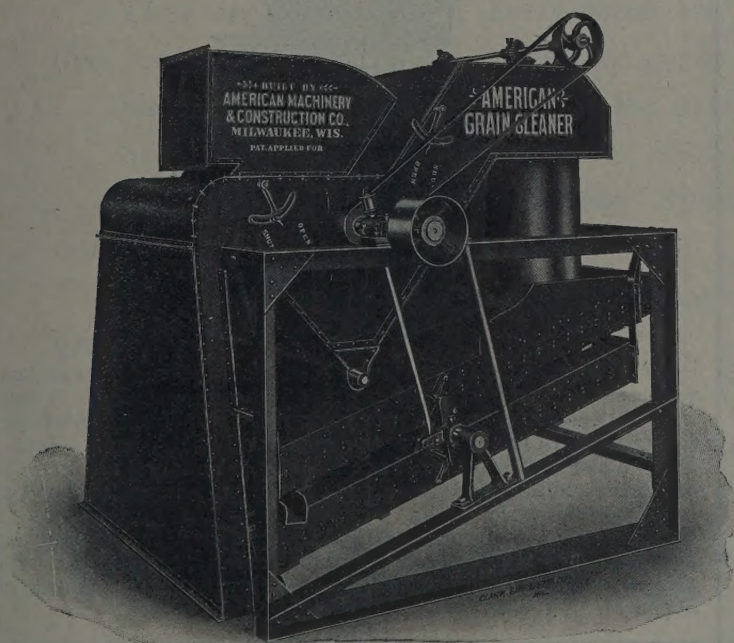
DRAG consists of all Iron parts and chain. No wood bottom and return boxes.

Either style made in any length.

For the Convenience of our patrons we carry a complete stock of Drags, Shellors, Cleaners, Manlifts, Dumps, Etc.

The Philip Smith Mfg. Co., Sidney, Ohio

Distinctive and Special Features of the American Grain Cleaner



The only adequate system for perfect Pneumatic Cleaning.

Separates all chaff and other light impurities from the grain before it reaches the sieves.

Cleans more thoroughly and has a larger capacity than any other machine of equal size.

Requires only half as much power as any other separator of equal size and capacity.

Has double compensating shakers and is so absolutely perfect in counterbalance that positively no bracing of any kind is required.

Has interchangeable perforated steel sieves and each of the two shakers is fitted with a very large main screen and an equally large seed screen.

Spring steel wire Automatic Traveling Brushes which are strong and simple in operation are furnished with the machine when so ordered.

This cleaner is wonderfully simple in construction and operation, and only the very best of materials and expert workmanship enter into its manufacture.

It is the cheapest to install, operate and maintain, and is a source of continual satisfaction to the user.

Built in combination wood and steel, and in all steel construction.

Full particulars and prices sent on request.

American Machinery & Construction Co.
103 West Water Street, MILWAUKEE, WIS.



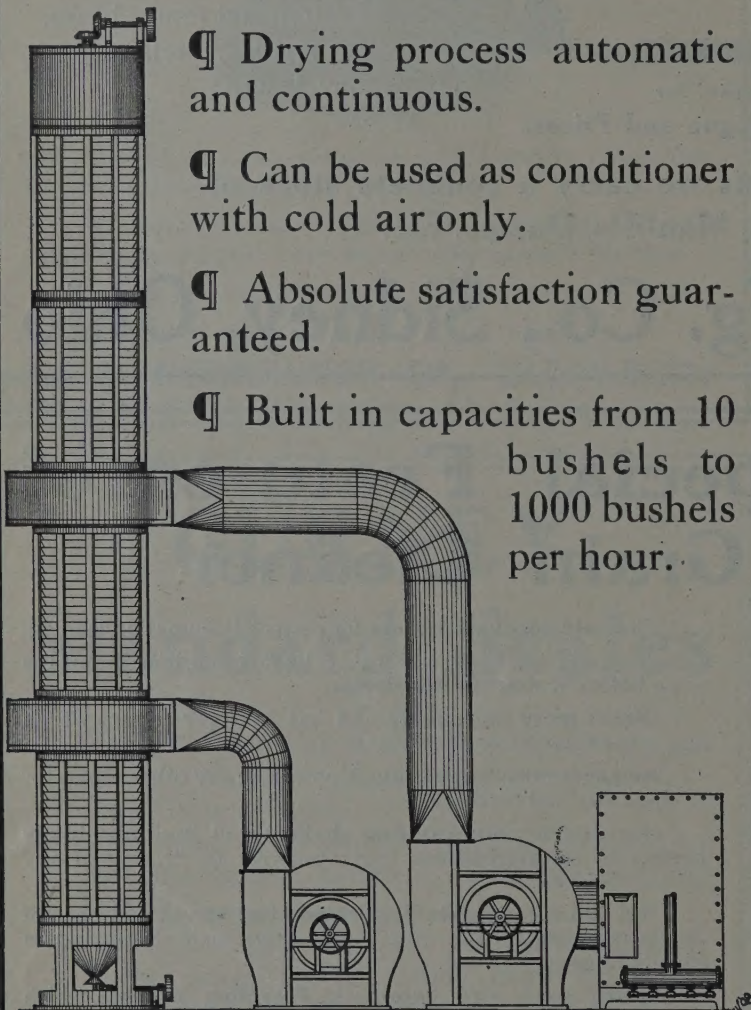
"EUREKA"



Grain Dryers

remove any desired percentage of moisture from the grain, conditioning it for shipping or storage with perfect safety.

¶ Every kernel is uniformly conditioned without checking.



¶ Drying process automatic and continuous.

¶ Can be used as conditioner with cold air only.

¶ Absolute satisfaction guaranteed.

¶ Built in capacities from 10 bushels to 1000 bushels per hour.

PATENTED

SOLE MANUFACTURERS

THE S. HOWES COMPANY

Originators of the Highest Grade Grain Cleaning Machinery

"EUREKA WORKS" = SILVER CREEK, N. Y.



REPRESENTATIVES

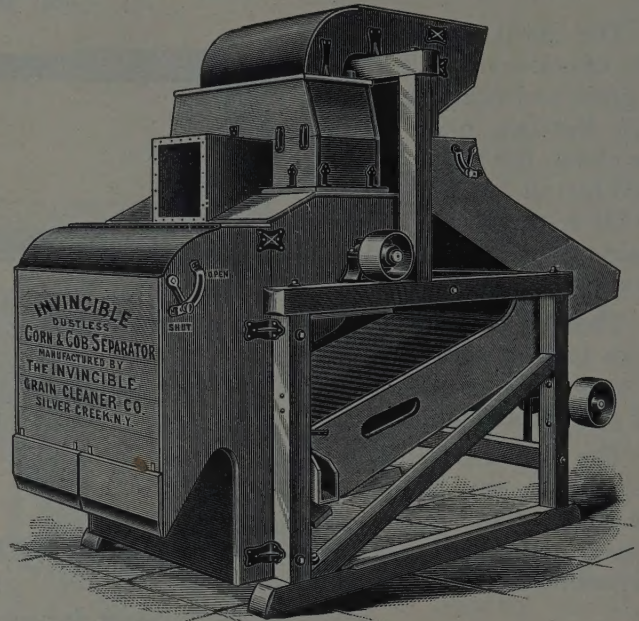
E. A. Pynch, 500 Corn Exch'ge, Minneapolis, Minn.
J. Q. Smythe, Hotel Savoy, Kansas City, Mo.
E. R. Watson, 223 E. Kentucky St., Louisville, Ky.
Wm. Watson, Green's Hotel, Philadelphia, Pa.
W. M. Mentz, Gap Mills, W. Va.



CLEAN YOUR CORN

This Separator takes out cobs, silks and all foreign matter and gives a high grade of corn.

It is the most popular corn and cob separator on the market, the result of its extremely nice work. Order now.



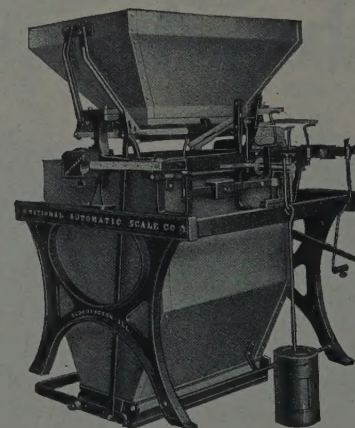
INVINCIBLE GRAIN CLEANER COMPANY

SILVER CREEK, N. Y., U. S. A.

REPRESENTED BY

J. H. Pank, 512 Traders' Bldg., Chicago, Ill.
F. J. Murphy, 225 Exchange Bldg., Kansas City, Mo.
The Strong-Scott Mfg. Co., Minneapolis, Minn.
C. L. Hogle, 526 Board of Trade, Indianapolis, Ind.
Chas. Beatley, Terminal Hotel, St. Louis, Mo.
J. J. Ross Mill Furnishing Co., Portland, Ore.

The NATIONAL



is the Automatic Scale you have been looking for. A scale that will cause you no worry and one that you can **swear by**. A scale that will **accurately** weigh your grain while you do something else. ¶ TO OPERATE: Turn on the grain and "let 'er go." It is a scale and should be balanced occasionally. Your grain may not be in No. 1 condition and you may elevate very irregular, but you can't fool the NATIONAL.

¶ The simplicity of the NATIONAL, together with our long experience in the manufacture of automatic scales, enables us to offer this high-class machine at a surprisingly low figure. It is sold on approval.

ADDRESS

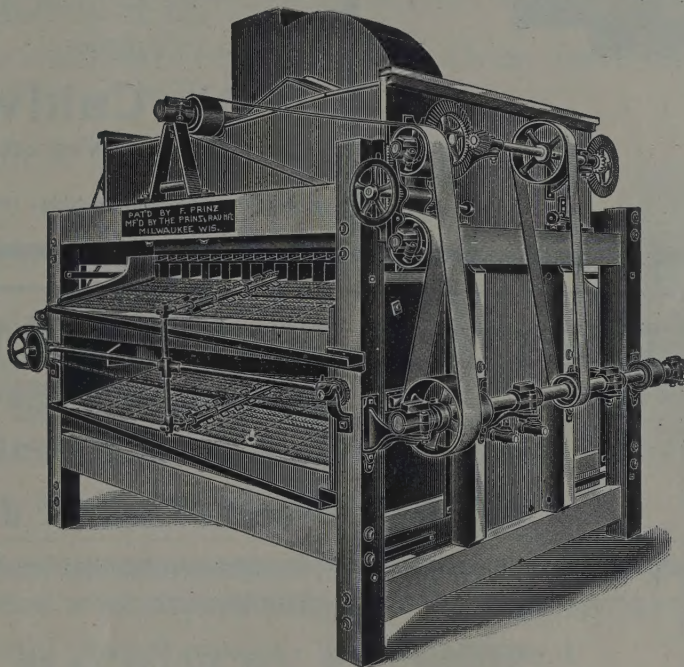
THE NATIONAL AUTOMATIC SCALE COMPANY

215 E. Douglas St., BLOOMINGTON, ILL.

The Most Perfect Grain Cleaning

is done with

Prinz Automatic Separators



These machines are in advance of all other grain cleaners now on the market. They are automatic in every sense of the word, and have many exclusive features that recommend them to wide-awake grain men.

Sheet Steel Screens, which stand the hardest kind of service and still retain their shape.

Seed Screens at the head of each sieve insure perfect separations.

The **Perfect Automatic Traveling Sieve Cleaners** keep the sieves clean under all conditions and require no attention.

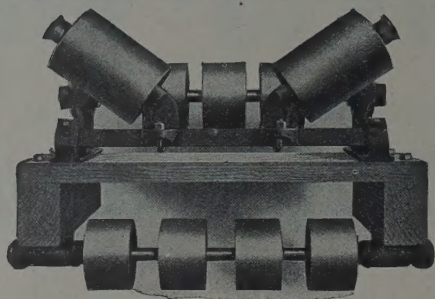
Perfect Ventilation is insured by a large fan, and an **Automatic Feeder** spreads the grain the full width of the sieve.

Write for Descriptive Circulars

THE PRINZ & RAU MFG. CO.

MILWAUKEE, WIS.

Represented by W. G. Clark, 701 Fisher Bldg., Chicago, Ill.; A. H. Kirk, 1-A Chamber of Commerce, Minneapolis, Minn.; F. E. Lehman, 124 Board of Trade, Kansas City, Mo.; C. H. Near, 757 Ellicott Square, Buffalo, N. Y.; M. D. Beardslee, 106 Piquette Ave., Detroit, Mich. European Representatives, Ingenieur Bureau, Prins Mauritsplein, La, The Hague, Holland.



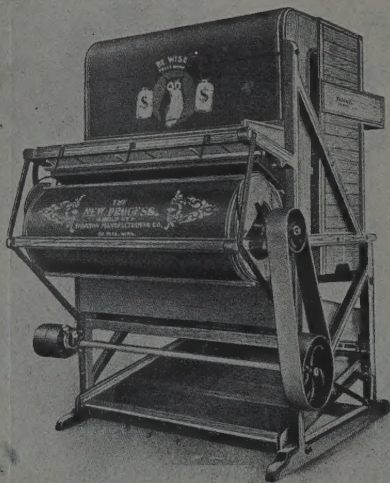
Improved Belt Conveyor

Carries all kinds of grain and mill products in package or bulk. Gradual, uniform curve of belt secured without complicated parts. Bearings thoroughly lubricated and have adjustment for taking up wear. Tripper substantial and reliable. Entire system economical and satisfactory—nothing to get out of order.

We manufacture a complete line of Elevating, Conveying and Power-Transmitting Machinery. Headquarters for supplies.

H. W. Caldwell & Son Co.
Chicago, Western Ave., 17th-18th Sts.

NEW YORK, Fulton Bldg., Hudson Terminal, 50 Church Street



The New Process Dustless Elevator and Warehouse Cleaner

FOSSTON MANUFACTURING CO.

ST. PAUL, MINNESOTA

Builders of ELEVATOR and MILL SEPARATOR MACHINERY

Our New Process Cleaner and Separator

is a thorough, complete and successful machine, built for practical use and to meet the conditions as they are found today.

It embodies new and exclusive features found on no other cleaner in the market, the most important of which are fully covered by our patents.

Our machines are specially adapted for separating wheat, oats and different kinds of mixed grain. Write for Special Catalogue.



Take Safe Measures and Use a Richardson Automatic Grain Scale

The railroads will accept its weights because the railroads use the scale themselves, thus your shipments are safe and you will be paid on your weights.

You know the scale is right because you see its beam balance with every load.

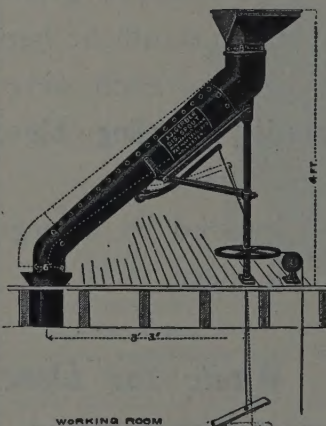
It will weigh grain of varying gravity accurately and can be reset for a change of grain in thirty seconds.

No multiplication of error due to multiplied levers—Guaranteed to weigh within one-half bu. in carload—Specially designed to weigh uncleaned grain—Absolutely cannot be choked or stopped by cob which is weighed with the grain—Takes up small space—Nothing to get out of order—Made by skilled experts and engineers of highest calibre and greatest experience. **Quality—Finish—Maximum Efficiency. Prompt Shipments.**

Richardson Scale Co., 2 Park Row, New York, N. Y.

122 Monroe St., Chicago, Ill.

413 Third St., South, Minneapolis



Good Spouts Reasonable Prices

That is what you get when you buy the

Gerber Improved No. 2 Distributing Spout

Will prevent mixing of grain. Can be operated from working floor. I make a specialty of elevator and mill spouting. For particulars write

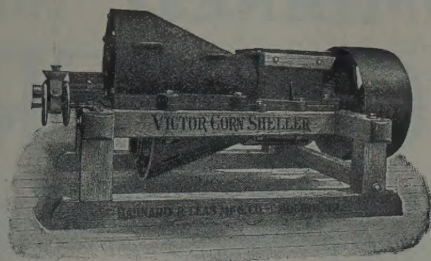
J. J. Gerber, MINNEAPOLIS MINNESOTA

Elwood's Grain Tables

Show the value of any number of bushels or pounds of **WHEAT, RYE, OATS, CORN or BARLEY** at any given price from 10 cents to \$2.00 per bushel. One of the most useful books ever offered to millers. Indorsed by prominent millers and grain dealers. Bound in cloth, 200 pages. Mailed on receipt of price

~~~~~ \$1.25 ~~~~~  
**Mitchell Bros. Co., 315 Dearborn Street, Chicago, Ill.**





## Get Ready for the New Crop

¶ To handle this crop to best advantage you will need a Victor Corn Sheller and Cornwall Corn Cleaner.

¶ Both machines are standard and leaders of their class.

¶ For efficiency, capacity, strength and durability they have no equal.

¶ They possess valuable features possessed by no other sheller and cleaner.

¶ We furnish complete machinery equipments for Grain Elevators, Malt Houses, Cereal, Corn, Feed, Flour and Cement Mills.

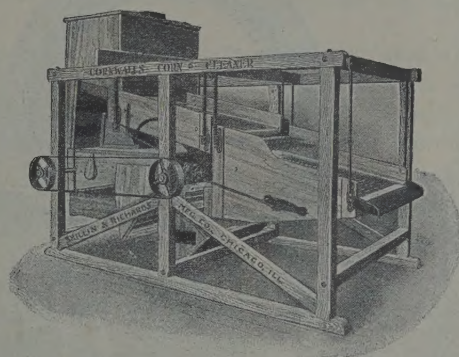
¶ We also make Scourers, Oat Clippers, Dust Collectors and Packers.

¶ Grain Dryers of all capacities.

¶ Write for latest circular and prices.

**Barnard & Leas Mfg. Co.**  
MOLINE, ILL.

GEO. J. NOTH, Special Sales Agent, 1330 Monadnock Bldg., Chicago, Ill. Tel. Harrison 5597



## CONSTANT MACHINERY

IS WHAT YOU WANT

### THE SAFETY MAN LIFT

has roller bearings, which make it easily operated. The improved brakes and safety catch prevent accidents. The adjustable counterweights and springs make it all that could be desired. Buy ours; it pays.

### THE B. S. G. CHAIN FEEDER AND DRAG



for feeding elevator boots and shellers, any capacity, any distance, automatically. Handles all kinds of grain without waste or mixing.

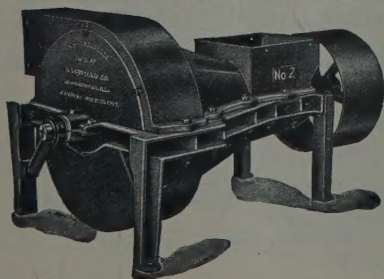
The ONLY WAY to feed a sheller.

### THE U. S. CORN SHELLER

Patented Oct. 17, '05.

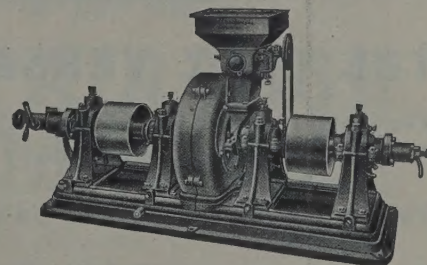
No pit or lower hopper. Cheapest installed. Quickest repaired. Our new Screw Adjustment can be used while sheller is full of corn and running. Shells clean, saves cobs. TRY IT.

Write for our catalog or you may miss something good



**B. S. CONSTANT CO.,** Bloomington, Ill.

## Some Vital Features



of the

## Monarch Attrition Mills

**Complete Accessibility of Parts**, permitting easy and rapid change of grinding plates.

**Chain Oil Bearings**, insuring perfect lubrication with a minimum of oil.

**Quick Release and Relief Spring**, preventing injury to the grinding plates by foreign substances.

### Send for Our New Catalogue

It tells all about the scientific grinding of feed.

Mention amount and kind of power you expect to use for operating a mill

**SPROUT, WALDRON & COMPANY**

Northwestern Branch, 301 Corn Exchange Bldg.,  
MINNEAPOLIS, MINN., C. H. Mohr, Mgr.

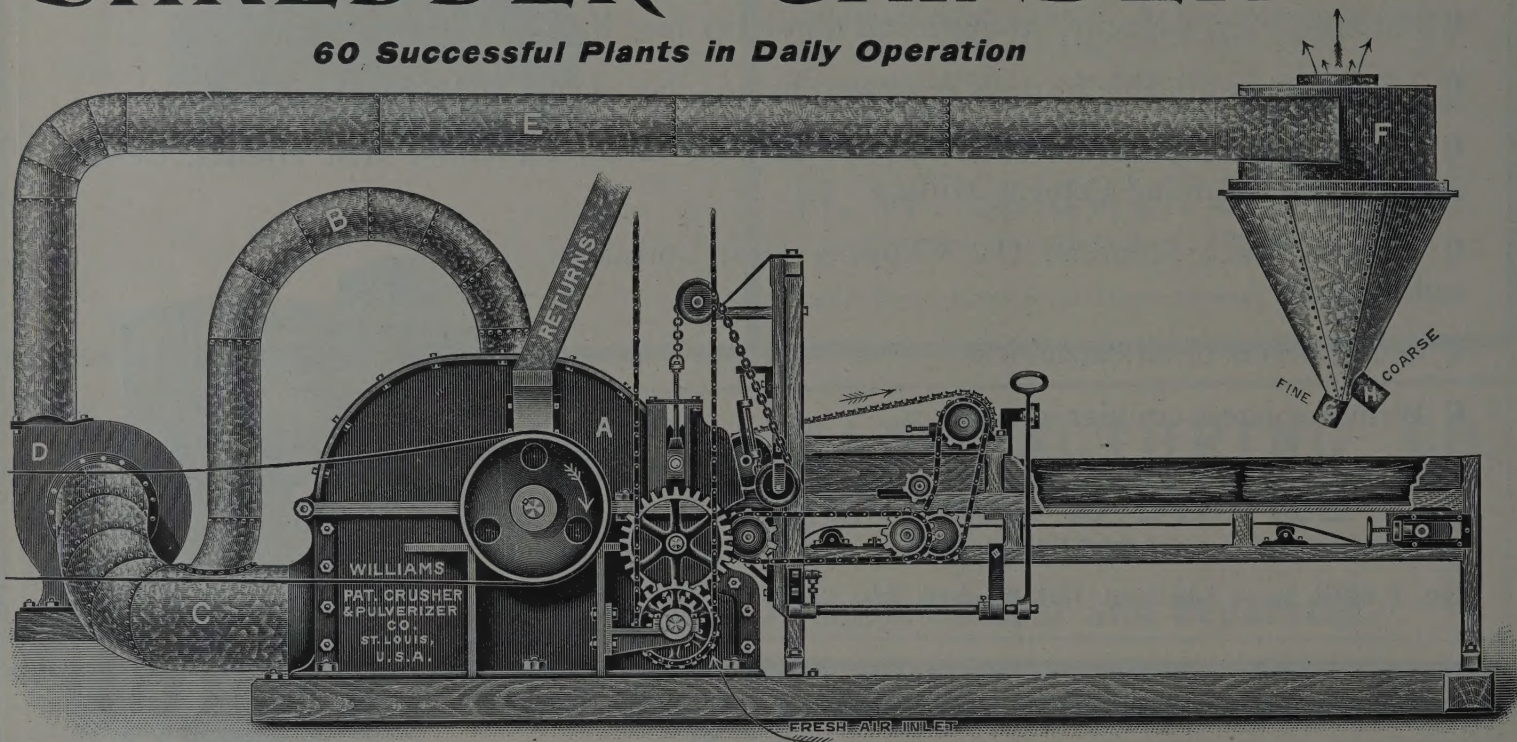
**Box 320, Muncy, Pa.**



# WILLIAMS PATENT COMBINED HAY AND STRAW CUTTER SHREDDER AND GRINDER

*Made in 8 Sizes*

**60 Successful Plants in Daily Operation**



## THE ONLY VERSATILE FEED GRINDER EVER PRODUCED

They will reduce EAR CORN with the HUSK on.  
They will reduce ALFALFA HAY from the BALE or from the STACKS.

They will reduce ALFALFA HAY and EAR CORN together.

They will reduce ALFALFA HAY and SHELLED CORN together.

They will reduce ALFALFA HAY and OATS together.

They will reduce ALFALFA HAY and FODDER OF ALL KINDS, with the CORN on.

They will reduce ALFALFA HAY and PEA VINES.

They will reduce EAR CORN ALONE or SHELLED CORN ALONE.

They will reduce OATS ALONE.

They will reduce ALFALFA HAY and two other kinds of CEREALS at the same time, as each machine has three separate feeding places.

We have a corps of competent milling engineers in the field making estimates and taking contracts for the installation of complete alfalfa meal plants, from the stump up.

They will reduce ANY FORAGE material or CEREAL, together or separately.

They will reduce GREEN CORN from the field.

They will reduce CLOVER HAY, TIMOTHY or ANY KIND OF STRAW.

They are CUTTERS when desired, GRINDERS when desired and SHREDDERS when desired.

They are COB CRUSHERS when desired.

They will reduce COARSE OR FINE by changing cages.

They will reduce OAT HULLS, RICE HULLS, FLAX SHIVES or any other FOOD MATERIAL.

They produce two grades of goods AT THE SAME TIME, coarse or fine, BY OUR COMBINED SYSTEM OF COLLECTING AND SEPARATING.

They WILL GIVE DOUBLE THE CAPACITY FOR THE POWER EXPENDED AND COST FOR REPAIRS OF ANY KNOWN GRINDER ON EARTH.

For Further Information  
Write for BULLETIN No. 7

Write for Catalog of the Noxon  
Automatic Hay, Meal and All Around Feeder

Southwestern Representative: A. G. Olds, Care Manhattan Hotel, Wichita, Kan.

Northwestern Representative: J. J. Ross Mill Furnishing Co., Portland, Ore.

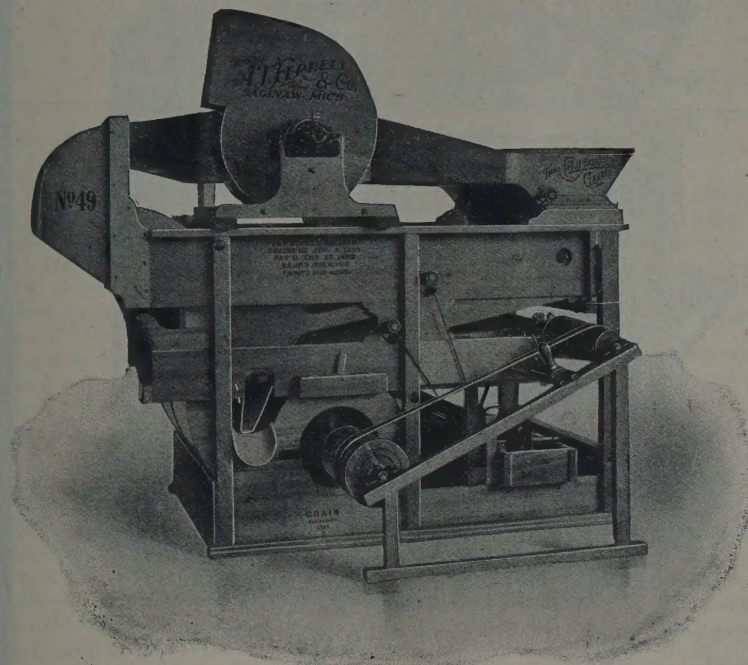
Pacific Coast Representative: O. J. Williams, 428 Monadnock Bldg., San Francisco, Cal.

Texas Representative: D. J. Hayes Co., 615 Washington Ave., Houston, Texas.

**THE WILLIAMS PATENT CRUSHER & PULVERIZER COMPANY**  
ST. LOUIS, MO., U. S. A.



# The "CLIPPER" CLEANERS with TRAVELING BRUSHES



Our traveling Brush device is the simplest, strongest and best made. Strong fibre brushes are made to travel back and forth across the under side of the screens, thoroughly brushing them and freeing the perforations from any grain or seed with which they may become clogged, making it impossible for the meshes to fill up.

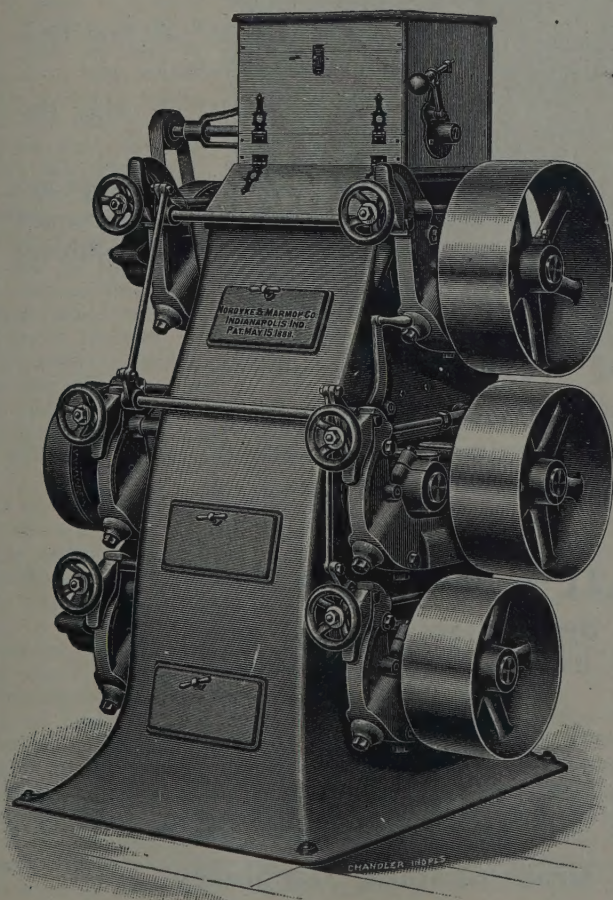
Any man who has used a Cleaner or Separator knows that the meshes or perforations in the lower screen soon become clogged so that it is necessary to "scrape" or "pound" the screen in order to clear the perforations. Our Traveling Brushes keep the screens clear all the time, and make the capacity and work of the machine uniform.

With a machine not equipped with the Traveling Brushes it is often necessary to keep one man in constant attendance when cleaning a dirty run of stock, to keep the screens clear and insure satisfactory work.

The advantages of using one of our machines equipped with Traveling Brushes is apparent: The quality of the work is improved; the capacity of the machine is increased; the cost of operation is reduced, and one has the satisfaction of knowing that he has the best that money can buy.

CATALOGUE WITH PRICES AND FULL DESCRIPTION UPON APPLICATION.

## A. T. FERRELL & CO., Saginaw, Michigan



The N. & M. Co.

## THREE-PAIR-HIGH SIX-ROLLER MILL

The most substantial, most economical in cost of maintenance. Has great capacity and requires comparatively small power. The only Six-Roller Mill with drive belts properly arranged to place the belt strain on bottom of bearings, where it belongs. It is not the cheapest mill in first cost, but it is by long odds the cheapest in the long run. It is without question the best roller feed mill on the market. Feed grinding pays best when you have a mill which will do perfectly any kind of grinding required and stand up under hard work without breakages and delays.

Send for Catalogue

### ELEVATOR SUPPLIES

We carry a complete stock of Heads and Boots, Elevator Buckets and other Elevator Supplies. All orders are given the very best of attention.

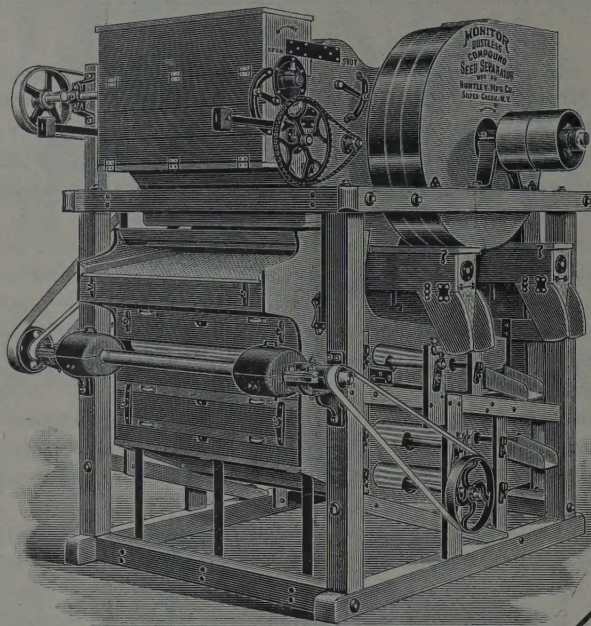
## Nordyke & Marmon Company

America's Leading Flour Mill Builders

Established 1851

INDIANAPOLIS, IND.





The  
**MONITOR**  
Seed Cleaner and  
Grader

Polishes, cleans and separates seeds. It is used by practically every large seed dealer in the United States and abroad.

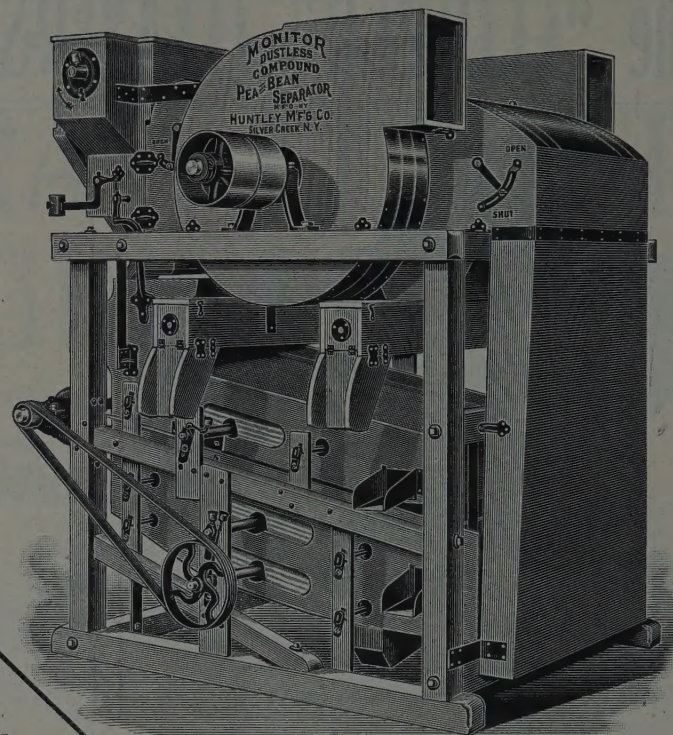
**The Dead Seed**

in clover and alsyke separated without loss in shrinkage—also perfect separation of

**Timothy Seed from Alsyke**

No other seed cleaner will do this work, let us tell you why.

Fully  
Protected by  
Important  
Patents



THE  
**MONITOR**  
Pea and Bean  
Separator

is a combined polisher, cleaner and grader.

Is used by the largest pea and bean dealers in the United States.

Gives a class of results no other machine can accomplish.

Will create a saving in shrinkage loss sufficient to pay for itself in a short space of time. Monitor cleaned beans command high prices always.

—For Elevator Use—

Either of these machines can be equipped with screens suitable for corn, oats, barley or wheat cleaning—Thus either machine is always accessible for use on any kind of cleaning or grading.

—Just Out—

An illustrated folder giving detailed description of the many distinct points of superiority found in the machines shown above. Why not post yourself.

**Huntley Manufacturing Co., Silver Creek, N. Y.**

The World's Largest Manufacturers of Grain Cleaning Machinery.



# The American Elevator and Grain Trade

A MONTHLY JOURNAL DEVOTED TO THE ELEVATOR AND GRAIN INTERESTS.

VOL. XXVIII.

CHICAGO, ILLINOIS, SEPTEMBER 15, 1909.

No. 3.

[For the "American Elevator and Grain Trade."]

## BLUE EYE CORN.

BY J. R. BOWIE.

In a former article I had something to say in regard to badly cured Western corn for bread purposes. I am no prophet nor the son of one, but the very thing that I said then would happen has come to pass. My exact words I do not remember; but the sum of the matter was that "if the Western elevators continued to ship damp and poorly cured corn to the South, there would be burdensome legislation against them"; and it has come to pass to some extent, as far as Nashville is concerned, at least.

Since starting to write this article my neighbor miller tells me he is now ordering corn from Nashville instead of Louisville because he cannot put the Louisville corn into meal and sell it at all with any degree of satisfaction to his custom trade. This has been my own experience time and time again, and I have not hesitated to say so through the papers.

The "Blue Eye" is nothing more than poorly cured, damp and unsound corn, unfit corn for bread purposes. The blue is a fungous growth that attacks the germ first because there is a little more moisture at that place; it will extend all over the grain if there is enough moisture in it, if left in bulk at rest or stacked up in bags and let alone for a while. I have handled corn that was not only "Blue Eye" but was blue face and blue body. When it gets this way it goes without saying that it is unfit for human food, and almost unfit for stock food.

Corn that is shipped to the South must be thoroughly dry if intended for bread purposes, or else it will get the "blue eye" in spite of anything that the miller can do for it; and when it gets in that condition there is nothing that can be done for it that will make it grind into good meal.

I wish to state further that if there is a miller or grain dealer who reads this that thinks there is no danger in eating unsound corn or wheat, let him take a small quantity in his mouth, chew it up and see what kind of a taste it leaves for the balance of that day. I have time and again had occasion to test wheat and corn in that way, by chewing a small quantity, and I have had all doubts removed in a hurry, leaving me with a worse than "dark brown taste" in my mouth.

I know nothing about who the millers of Nashville are that have warned the corn shippers to desist shipping "blue-eye" corn to that market, but I will venture the guess that they know their business, and have perhaps had threats of prosecution on account of Pellagra or dead stock. It does not make so much difference when the corn is shipped North or to a country where none of it finds its way to the table, as the dumb animal can't very well tell the tale of its unsoundness; but the Southern people who are corn-bread eaters know the dif-

ference and will do some tall kicking and in a way that will be heard.

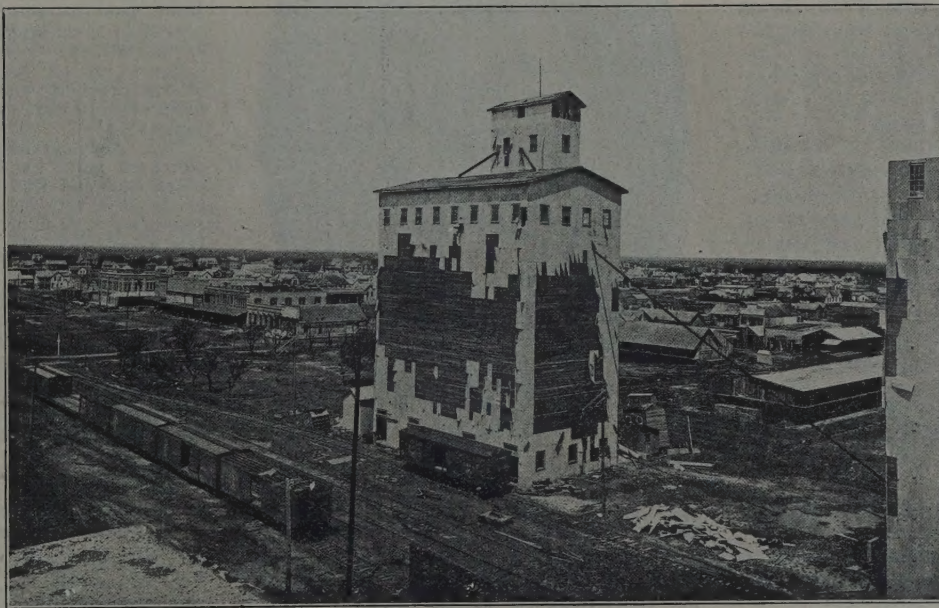
I wish it fully understood that I am not an enemy to the grain men of the West, but I intend to continue to raise my voice against the shipment to the South of poorly cured corn.

When corn gets the "Blue Eye," it is like Poke Miller's negro's Limburger cheese, "It's a leetle too fur gone."

## BEHAVIOR OF A WIND STORM.

The freakish behavior of wind and lightning is beyond human anticipation; and not a wind or electric storm of any magnitude occurs in any part of the world, perhaps, that some new marvel of the freaks of these two destructive forces is not reported.

The illustration comes to us from El Campo, Texas, by the thoughtful courtesy of Geo. Armistead, vice-president and general manager of the



RICE ELEVATOR OF THE EL CAMPO RICE MILLING CO. AFTER A HURRICANE.

El Campo Rice Milling Company, whose rice elevator, one of the few good houses of that kind in the rice country of the Gulf littoral, stood in the "teeth of the storm" during the West India hurricane that passed over parts of Texas on the afternoon of June 21 last.

The storm began about 1 o'clock p. m. and lasted until 7 o'clock of the same day, being what the sailors would probably call "a living gale." When the "gale" was ended, the El Campo Company's elevator, which had been covered with corrugated galvanized iron, presented the "skinned" appearance seen in the picture.

Much damage was caused by the storm in other portions of its track, as at Bay City and Eagle Lake. At the latter place, the entire fourth floor of the Lakeside Rice Mill was carried away, and the brick warehouse of the Eagle Lake Rice Milling Company leveled with the ground and the company's mill itself damaged; so that the El Campo Company after all got off quite well in its encounter with the wind.

Superior-Duluth inspected the first car of new crop wheat on August 25 in a G. N. car from Pierpont, N. D. It was No. 1 durum.

[For the "American Elevator and Grain Trade."]

## CONCERNING FORMER MISSISSIPPI RIVER BARGE LINE TRANSPORTATION.

BY L. C. BREED.

The writer is informed that the principal reason why, five years ago, the Mississippi Valley Transportation Company gave up the river freighting business between St. Louis and New Orleans was that it had reached a point where it did not pay. The main cause for the business becoming unprofitable was the falling off in the export trade in red winter wheat, which was the principal commodity for down-river transportation; and the falling off in the export business was due to the scarcity and consequent high price of this variety of wheat that had been the kind principally obtainable at St. Louis and which was wanted mainly for the Continental markets. The loss of the company's floating elevator at New Orleans, which was burned, and the charge for transfer at that port through public elevators, was a further and serious handicap that hastened the abandonment of the service.

The M. V. T. Co. was organized in 1866 and its first tow of barges to New Orleans started on the first day of April. The shipments of bulk grain rapidly increased and the success of the line was so great that another company was organized in 1880, called the St. Louis and New Orleans Transportation Company.

At this time, shipments had assumed such proportions that the eyes of Jay Gould and the Wabash Systems, entering at St. Louis, saw an opening they were not slow to avail themselves of. Consequently they joined the latter company and became formidable competitors of the M. V. T. Co. A series of short crops, however, seriously affected

the barge business, and a new company was formed, consolidating the two lines, under the name of the St. Louis and Mississippi Valley Transportation Company. The new organization was capitalized at \$2,000,000; and at that time it controlled some ten or twelve powerful tow-boats and about 100 barges, some of which had a capacity of 1,500 tons. This being about double the tonnage for which there was business, the surplus was retired. H. C. Haarstick was the president of the company. He is still a prominent St. Louis business man, though not at present identified with river transportation.

During the period of Mr. Haarstick's management of the barge line, the river rate on bulk grain was reduced from 12 and 14 cents per bushel to 5 cents per bushel. Grain elevators were controlled at Belmont, Mo., and at New Orleans. There was a well-equipped marine railway and dock yard at Mound City, Ill., and the necessary floating elevators for transferring bulk grain from barges to ocean steamers were owned at New Orleans. At one time the company did an annual business of 12,000,000 bushels of grain and handled about 150,000 tons of package freight. The company established a bonded water route for imported goods, which



greatly facilitated the business of merchants in the interior. Ultimately, however, the paralleling of the river by the railroads made great inroads on the barge lines' trade, through competition in rates and the furnishing of switching facilities, thus saving, in case of package freight, part of the expense for teaming the goods.

Since the abandonment of river traffic by the Mississippi Valley Transportation Company the situation has become still more unfavorable for securing a paying volume of such wheat freight, for the following reasons:

Whereas, some twenty-five years ago, there were at St. Louis and East St. Louis in the neighborhood of thirty mills, there are now but three. Many of the proprietors of these mills have control of mills in Missouri and Illinois, and take much of the soft wheat which used to come to St. Louis.

There has been a steady, and, in the main, quite continuous, appreciation in the price of wheat, particularly the soft wheat of this section, owing to growth of the Middle West in population, and the entire country as well, and a falling off (in this section) in the raising of wheat. During the month of August prices in this market were maintained at a level well above all other Western markets, and, as a result, the receipts of soft wheat were larger than for the corresponding month in any year since 1902. This wheat was shipped principally to South-eastern milling territory and was not available for export on the basis of domestic trade prices.

There is now more competition than in former years for soft wheat from the Southeastern millers, and particularly so on the part of Nashville mills. The opening of the Thebes Bridge Route has diverted considerable of this wheat from the St. Louis market. Hard wheat from Kansas, Nebraska and Oklahoma is largely headed off from coming to St. Louis by the three cents per bushel discount now in force at Kansas City, and there is not a large demand for it enjoyed by local houses.

There has been a serious shrinkage in the elevator capacity of St. Louis during the past few years. It is also claimed that, without merchandising—that is, dealing in grain—the elevator business will not pay. Unless there were a severe car famine, which seldom happens, or unless there were a short crop of wheat in Kentucky and Tennessee, it would not pay to ship wheat by river to Nashville except possibly in the spring when local wheat becomes scarce. Cairo might be a favorable market for a limited quantity.

While the barge line was able to make as quick delivery on the average as the railroads, the cost of insurance to New Orleans was a factor to be reckoned with.

The up-river freight formerly consisted of lumber, sugar, molasses, rice and general merchandise.

It is stated that, at the time of the operation of the barge line, there was an undue amount of complaint respecting the inspection at St. Louis.

At low stages of the river between St. Louis and Cairo, the barge line was compelled to run the barges light-loaded and at Cairo to reduce the number of barges by loading part of them heavier. The maximum load was 50,000 bushels and the minimum 25,000, according to the stage of the river. It required about eight days to go down and about a fortnight to return.

The loading capacity of the Burlington Elevator, with two spouts, is 40,000 bushels per hour; that of the Mississippi Valley Elevator, 20,000; the Rogers, 10,000, and the Advance (at East St. Louis), 20,000.

The Centennial celebration of the incorporation of the City of St. Louis will take place on October 3-9. There will be four great pageants of magnitude and character that will surpass anything of the kind heretofore seen in St. Louis to illustrate the city's history, the city's utilities, the city's educational strength, and the city's industries. On one evening of the week will take place the Veiled Prophet pageant and ball with more than the usual features of interest. Upon other days will occur the elaborate ceremonies of laying of corner-stones of the Municipal Building, to cost \$1,500,000, and of the Central Library, to cost \$1,000,000. Besides

all which there will be the "trimmings" in the way of balloon and aeronautic features, athletic tournament, fire works, reunions, public meetings of religious and paternal organizations, etc.

### H. S. ROBINSON.

It is a well worn adage that the busiest successful man is always he who is called upon most often to give his time and talents to the public service, or that of the organized bodies of the trades and mercantile or industrial interests with which he is identified. This is so true that even the most unob-servant among men will fecal at once many cases within his own personal experience and knowledge to corroborate and confirm the old saying.

At least Harry Watson Robinson of Greenspring, Ohio, is such a man. A busy business man, with "many irons in the fire" at Greenspring, he has yet taken an active and forceful interest in both the grain and hay associations of his immediate environment as well as of the state of Ohio and the national bodies ever since he became a merchant. In consequence, some five years ago he was made a director and then vice-president of the National Hay Association, as a studied preliminary, perhaps, to "drafting" him for a higher service later on.



H. W. ROBINSON.

So this year, he had hardly "gotten his seat warm" as president of the Ohio Grain Dealers' Association before the National Hay Association made him its president for the ensuing year; and so piled Pelion on his Ossa both as to his honors and his responsibilities.

But Mr. Robinson's training warrants the confidence reposed in him; he knows how to work and to do things. Born on July 29, 1872, near Tiffin, he spent his boyhood days on a farm, his father being the Hon. Joseph T. Robinson, one of Ohio's most prominent farmers. He entered Heidelberg University at the age of eighteen and on completing a classical course there, received his degree of A. B. from that institution in 1895. He taught languages at the Greenspring Academy, Greenspring, O., during the following year, after which he served two years as principal of the same school. During this period he was appointed school examiner of Seneca County, and served in that capacity for three years.

He entered the hay business in 1898 at Greenspring and during the following year became engaged in the grain business also, and has continued in both lines since that time.

In 1905 he organized the Robinson-Kraut Company and is president and manager of that company at the present time. He is interested in two other local incorporations also; is a member of the Masonic Fraternity and the Knights of Pythias as well as of the Presbyterian Church.

The first car of new crop Canadian wheat arrived at Duluth during the last days of August.

### EFFECT OF MISQUOTATION OF RATES.

Frank H. McCune, rate expert, who was the principal witness for the people of Spokane in their action before the Interstate Commerce Commission against the transcontinental railroads for equitable freight rates, has prepared a statement, in which he shows a vital defect in the Hepburn Act to regulate commerce, under which, he declares, it is utterly impossible for any shipper in the United States to obtain relief from losses through misquotation in rates by railroad companies.

Mr. McCune urges the people of the country to support the Trans-Mississippi Commercial Congress in its effort to secure the adoption by the United States Congress of an amendment to protect the shippers, as recommended by the first named organization at its annual meeting in Denver, in August. He says:

Three years have elapsed since the passage of the Hepburn amendment to the act to regulate commerce, and shippers are now awakening to the fact that the railroads are protected from their own acts in making misquotation in freight rates, either willfully to secure shipments or otherwise, while the penalty of the loss falls upon the shippers using the rates quoted by the railroads in making delivered prices or buying goods on the basis of rates furnished to them by the carriers.

Though bankruptcy ensues, a shipper is denied relief under the law, for the reason that he is charged by the law to know what the legal rate is. On the other hand, the law compels the railroad to recover by civil action any sum that is less than the lawful rate, although the railroad may have previously quoted the rate the shipper used in the purchase or sale of the consignment.

A case was heard before the Interstate Commerce Commission, where the shipper attempted to recover what he believed to be an overcharge. It proved to be an undercharge. Under the provisions of the law the railroad was supposed to institute action to recover undercollections covering a period of five years, in which event the merchant would have been ruined. In substance the case was as follows:

Two lines operated from the point where the merchant made his shipments. For years he had patronized one line exclusively, making delivered prices at a rate of 27 cents the hundred pounds. Receiving a rush order and not being able to obtain a car from the line he patronized, he applied to the other, which furnished the car at the same rate. On arrival at destination a rate of 33 cents was charged.

At the hearing the general freight agent of the one line testified that the correct rate was 33½ cents, while the representative of the other line maintained the rate was 34½ cents. The matter was referred to the auditor of the Commission, who determined the rate to be 35 cents, or eight cents higher than that used by the shipper for five years.

Another instance of threatened bankruptcy concerned a lumberman who had made large contracts at delivered prices of lumber on a rate quoted by the railroad's general freight agent. To fill the contract, which the civil law compelled him to do or be liable for damages, would have entailed a loss of \$100,000. He appealed to the Interstate Commerce Commission for relief, but was told that the Commission was powerless to act in the matter.

Scores of instances could be cited to show losses to shippers under this state of affairs. I make mention of one: A settler moving his household effects from Iowa to Idaho received four different quotations from the railroads, the rates ranging from 53 to 77 cents the hundred pounds. What was the legal rate?

This condition prevails throughout the United States and no territory or class of shippers is exempt. The time is near at hand when, to avoid heavy fines, the railroads must collect by civil action such undercollections as are made on misquotation of rates by their agents. There is no parallel in law equal to this immunity of the railroads. In all other affairs the agreements made between the contracting parties are binding, but the railroads are protected in their omissions and commissions, while the people suffer for the carriers' sins.

A rising wave of remedial legislation of transportation reform is sweeping from coast to coast, but the combative spirit of the railroads is devising every legal technicality and throwing it across the people's will as a barrier to progress in this direction. If the law protects the carriers in their contracts with the people, it should not discriminate by abandoning the people to the merciless will of the railroads.

The recommendation by the Trans-Mississippi Commercial Congress that the Congress of the United States enact an amendment to the act to regulate commerce,—“requiring railroads to quote rates



in writing when so requested by shippers, and that rates so quoted be protected to avoid loss to the shippers, and assessing a reasonable penalty against the carrier making the misquotation, so that the provisions of the act against rebating may be kept inviolate,"—should have the endorsement of every commercial body in the United States.

These organizations will be invited to join in petitions to Congress to enact the amendment as a safeguard against the evil practice in misquotation of rates, and the congressional representatives will be urged to give their support to the measure, which is of vital importance to all parts of the United States suffering losses from this fatality of the Hepburn act, under which the Interstate Commerce Commission is working.

### INCENTIVE TO RUSH GRAIN.

The Union Pacific has adopted a system of cash prizes to be paid to its local agents as an incentive to keep loaded grain cars on the move to destination. The period covered included all of August and will be closed with October. The details of the scheme are as follows:

At stations where 250 or more cars of grain are loaded in the three months mentioned \$75 will be awarded to the agent having the best record; at stations loading between 150 and 200 cars \$50 will be given; at stations where between seventy-five and 150 cars are loaded, \$35 will be given; at stations loading between twenty-five and seventy-five cars \$25, and at stations where fewer than twenty-five cars are loaded \$15 will be the reward.

The awards will be made by the following considerations:

- (1) Time consumed in making empty and setting cars that are available for grain loading.
- (2) Prompt inspection of cars as to fitness for grain loading, having them clean and in serviceable condition, particular attention being given to roofs and doors.
- (3) Proper insertion of grain doors (reinforced side placed to the inside) to prevent bulging and also leakage through outside doors.
- (4) Prompt loading, proper sealing and billing.
- (5) Percentage of load to capacity of equipment taking total number of cars loaded with grain.
- (6) Percentage of cars arriving at destination without any leakage. (Cars damaged in transit causing leakage will be eliminated.)

The scheme is to be worked out without in any way interfering with shippers' rights as to cars, free time, etc.

### CORN FREAKS.

A South Carolina planter, a contestant for the prize offered by Commissioner Watson for the best acre of corn grown by a South Carolina farmer, has produced a stalk that carried eight ears and had had one more that had been blown down by the heavy wind and rain. It is said that in his field there are a number of stalks that have eight ears, and one, at least that is laden down with ten ears. The stalks carry all the way from two ears to eight and ten ears, all of the ears being well developed.

Charles Hill, 907 South Raynor Avenue, Joliet, Ill., has a full grown ear of corn which contains three additional ears on its side. This nature freak was found on a stalk growing in the rear yard of Mr. Hill's home. The cob proper measures eight inches in length, while the ears attached to it at the base measure from three to five inches.

The Dispatch at Columbus, O., says: "Guy D. Denton, of 1723 South Sixth Street, has a freak in the shape of an ear of corn which has attracted considerable attention. There are, in fact, nine distinct ears, but they are attached at the bottom as a single ear."

A new steamship line, sailing direct from Philadelphia and New York to Alexandria has just been established and the first cargo of American products thus shipped to Egypt consisted of corn and coal.

Governor Burke has appointed J. T. Clifford of Mohall and H. O. Brown of Benson county as North Dakota members of the Minnesota Board of Grain Appeals. The salary of the positions is \$3,000 per year and the work will occupy all the time of the members. They have no vote on the Minnesota Board, being advisory members only. A report will be made to the governor to be transmitted to the next legislature.

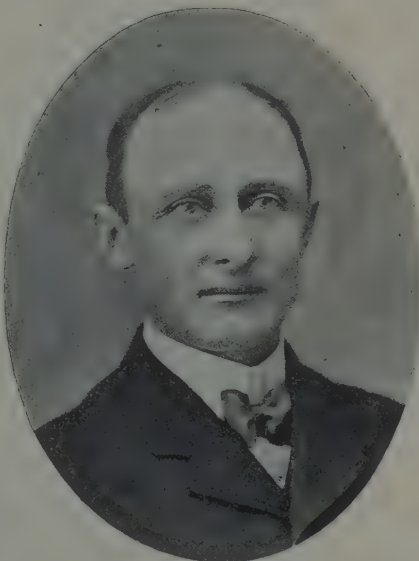
### ILLINOIS MEMBER OF THE NATIONAL COUNCIL OF COMMERCE.

E. M. Wayne, who served as president of the Illinois Grain Dealers' Association for the three years ending in June, 1909, was recently appointed a member of the National Council of Commerce of Washington, D. C., to represent the Illinois Grain Dealers' Association.

Mr. Wayne's home is at Delavan, Illinois. He is interested in the grain business with his brother under the firm name of Wayne Bros.' Grain Co. They also handle grain at elevators at Winkle, Wayne and San Jose, as well as lumber and coal at all their stations, operating as Wayne Bros.' Lumber Co. The corporation was organized about a year ago, the stockholders being Mr. Wayne and his brother, with offices at Delavan.

Under the direction of Mr. Wayne the Illinois Grain Dealers' Association has grown to be the strongest and most potent force in the grain trade of the country, and when the National Council of Commerce was organized, at the suggestion of Hon. Oscar S. Strauss, as Secretary of the Department of Commerce and Labor, something more than a year ago, with headquarters at Washington, Mr. Wayne took an active interest in the work which it was supposed to do.

The National Council of Commerce has been



E. M. WAYNE.

evolved naturally in this era of organization for bringing the mighty forces together for the purpose of working out methods for industrial results. Such organizations exist in Great Britain, Germany and France and other Continental countries, and are of vast assistance both to the governments and to their industrial interests. The Hon. Oscar S. Strauss in an address delivered at Washington, D. C., December 10, 1908, at the first annual meeting of the National Council of Commerce, said:

"The purposes to be served by the National Council of Commerce are not for oratory, or for dining, or for well-turned resolutions, but for practical everyday work, in order to bring the great commercial interests of this country together so that they can consult, advise, and act, to the end that when these combined bodies speak they will voice the well-considered interests of commercial America.

"Our lawmakers are desirous of carrying out the mandate of the people of the country and serving their best interests, and where they fail that failure is largely due to lack of knowledge and information, and the fault is yours if you will not take the proper steps, by effectively organizing, so as to co-operate with your governmental agencies. Of course, there are a great many questions, as a national organization, representing the varied industries of the country, upon which you can not agree, and that very fact is a proof that they are not of common concern. There are, however, other questions which require consideration and deliberation,

in order to determine whether you can come to an agreement, and until you can you cannot speak for commercial America."

At the last annual meeting of the Illinois Grain Dealers' Association, a resolution was passed instructing the board of directors to make investigation of the workings of the National Council of Commerce, and, if in their judgment they deemed it to be to the interests of Illinois grain shippers, to secure a membership in the organization. This was done, and President Montelius appointed Mr. Wayne as the delegate to represent the Illinois Association.

There has grown up in the last few years a desire by certain interests to have passed legislation by the Congress which would be inimical to the grain interests, and the board of directors believe that a connection at Washington, through the National Council of Commerce, where the grain interests can be immediately represented, and where senators and representatives of the National Congress can secure reliable and correct information in relation to grain business, will be highly advantageous and have great influence in preventing legislation which would be detrimental to the trade. The selection of Mr. Wayne as the first representative of the Illinois Grain Dealers' Association in the National Council of Commerce reflects great credit on President Montelius's judgment and is evidence of the careful attention which he as the head of the Association will give to its affairs. It is needless to say that the Association of Illinois dealers will be ably represented at the meetings of the National Council of Commerce by the delegate from this state.

### DOCKAGE RULE RESCINDED.

The Grain Commission Men's Association of Minneapolis and others in the Northwest having protested against the rule adopted on August 3, allowing a dockage for dirt from barley, oats, etc., by the inspectors, the Minnesota State Grain Board of Appeals on August 14 issued the following notice rescinding said rule:

At the annual meeting of the State Grain Board of Appeals, held August 3d, the existing rules were changed so as to give the Inspection Department the authority, when necessary, to place a dockage on oats, barley and speltz. At this meeting no objection was raised to the action taken, although the usual notices calling said meeting that had always prevailed had been given. At the request and on petition of many representing they were misled by wrong date on copy of the official notice calling this meeting, as posted on the bulletin board of Minneapolis Chamber of Commerce, another hearing was ordered for Saturday, August 14th, in order to give the fullest opportunity for all interested to present their views.

Recognizing the very large and vigorous protest presented, covering all sections of the three Northwestern states, from producers, independent farmers, and other grain interests as against the change adopted, the Board, while realizing these objections were made in good faith, yet under a misapprehension of the practical application of the new rule, which was largely to be used to stop the pernicious practice of dumping the screenings and other foul matter into these grains by grain handlers, have changed the rule adopted August 3d, 1909, and the rules of 1908 will be continued, under which, in the several grades of oats, barley and speltz, the amount of dirt, foul seeds and foreign grain is taken into consideration in arriving at the grade.

### SOUTH AFRICAN EMBARGO.

Owing to the congestion of maize for export at Durban, Natal, S. A., the Natal Railway Department has notified the Central South African Railways that they are for the time being unable to accept maize for export *via* Durban. It is an indication of the satisfactory improvement in the trade of South Africa, and of the very rapid expansion of the maize industry, which bids fair to bring so much wealth to South Africa. Arrangements are now being made by the Union Castle S. S. Company to put on extra ships in order to cope with the congestion.

Galveston on August 26 sent to Tampico, Mexico, 80,000 bushels of wheat, all of which was in bags. This cargo, which is valued at \$96,800, is consigned to mills in the republic.



[For the "American Elevator and Grain Trade."]  
**CONVERSION OF GRAIN BY RAILWAY  
 COMPANY AT DESTINATION.**

BY J. L. ROSENBERGER,  
 Member of the Cook County Bar.

The Young-Flesch Grain Co. of St. Louis sold to the Wayland-Wright Grain Co. of Kansas City two cars of corn to be shipped to Birmingham, Ala. The cars were delivered by the first-named company to a railroad company at St. Louis on February 28 for transportation. Shipper's-order bills of lading were delivered by said railroad company to the Young-Flesch Company, on which was the notation: "Notify Wayland-Wright Grain Company." Upon the receipt of the bills of lading, the Young-Flesch Grain Co. indorsed and delivered them to the Wayland-Wright Grain Co. The latter had contracted to sell the corn to one Stevenson of Birmingham, and upon receipt of the bills of lading the Wayland-Wright Company drew a draft on Stevenson for the purchase price of the corn; and, having indorsed the bills of lading, attached the same to the draft and delivered both to the National Bank of Commerce of Kansas City, and received credit for the amount. One of the cars of corn arrived at Birmingham on the 11th day of March and the other on the 16th day of March.

On the 26th day of March Stevenson, who had received an invoice of the corn, wrote to the last carrier's freight agent at Birmingham, requesting that he send the cars to Bessemer, a town 14 miles from Birmingham, but within the switch limits of the latter, immediately on their arrival at Birmingham, not knowing at the time that they had then arrived at their destination. Upon this request and without the production of the bills of lading and without any inquiry for authority on the part of Stevenson to ship the corn to Bessemer, the railway company reshipped it to that place without notification to either Stevenson or the Wayland-Wright Company that it had done so.

The location of the corn was for a time lost sight of, the agent having forgotten that it had been sent to Bessemer. When it was ascertained that the cars of corn were at Bessemer, the district agent of the railway company notified Stevenson of the fact, who ordered them to be returned to Birmingham, where they again arrived, one on April 21st and the other on April 23d. Stevenson then refused to receive the corn, owing to its damaged condition. The evidence tended to show that the corn had been injured by being kept so long in bulk at Bessemer. Corn kept in cars at that time of the year would, according to experts, in the length of time between the 26th of March and the 26th of April become heated and damaged.

When Stevenson refused to accept the corn, the railway company sold it and realized the net value from the sale of \$434.62, which it held to the order of the owner of the bills of lading. It was shown that had the corn been kept longer the process of heating would continue until it would have become entirely worthless.

The Kansas City Court of Appeals holds (National Bank of Commerce of Kansas City vs. Southern Railway Co., 115 Southwestern Reporter, 517) that the bank was entitled to recover from the last carrier for conversion of the corn.

It appeared that upon the arrival of the corn at Birmingham, the railway company's agent sent a notice to the Wayland-Wright Company at Birmingham; but it was shown that its agent there knew that said company was located at Kansas City and not at Birmingham. This notice was not received, and was returned to the railway company. The court holds that the action of the railway company's agent in not notifying the Wayland-Wright Grain Co., the consignee, of the arrival of the corn, and in shipping it at the request of Stevenson to Bessemer and there holding it until it was damaged, was an act of conversion. It was the duty of the railway company, when the corn arrived at Birmingham, the court says, to have notified the consignee, as required by the bill of lading. Had this notice been given, the corn could have been delivered to Stevenson on its arrival at Birmingham upon payment of the purchase price. Notwithstand-

ing Stevenson requested the railway company's agent when the corn should arrive in Birmingham to ship the cars to Bessemer such request was not binding on the railway company, as the destination of the corn was Birmingham and not Bessemer; and the consignee had the right to require that the grain should be received and paid for at the former and not the latter place. Therefore the shipment to Bessemer was a violation of the contract of shipment as to delivery and a conversion.

The court does not agree with the contention that as Bessemer was within the switch limits of Birmingham there was no conversion as there was no change of destination. Bessemer being 14 miles from Birmingham, and notwithstanding it was within the same switch limits, being at a different point and distinct from that of delivery.

Nor does the court consider that the mailing of the notice to the Wayland-Wright Company at Birmingham was sufficient, when the railway company's agent knew it was not doing business at that place and that it was not its post-office address. The railway company was bound to notify the consignee at its known place of business wherever that might be; and the court holds that it was not a sufficient compliance to mail the notice to the com-

the Kansas City Board of Trade, F. G. Crowell, and Secretary Smiley of the Kansas Association, no reply seems to have been made to the latter's suggestion that the receivers interested voluntarily agree to refund to shippers the value of the 100 pounds of grain deducted after August 15 if the law is held valid. Mr. Smiley therefore recommends to his membership, and the advice may be repeated to all other shippers to Kansas City, Mo., to save their accounts of sales showing the 100 pounds deducted; for if the law is sustained the receiver will be legally liable for the deduction.

### THE MOTOR TRUCK FOR GRAIN.

The motor truck for grain, flour and package freight generally is in less common use in this country than in England, perhaps, where truck animals and their keep are more expensive than here, but the new carrier is "coming," without a doubt. The advantages are so many and so obvious that for heavy teaming the motor will in time usurp the place of the draft horse, much to the relief of those who see so much abuse of that noble beast by unfeeling teamsters in the cities.

The motor truck shown in the picture is one



MOTOR TRUCK AND ELEVATOR OF ROYCE & COON GRAIN COMPANY.

pany at Birmingham, where it was known not to be doing business and where it would not be received.

### DOCKAGE AT KANSAS CITY.

The law enacted by the late Missouri legislature with reference to dockage at grain elevators, etc., became effective on August 15. It provides that—

Every sale of grain, seeds, hay or coal shall be made on the basis of the actual weight thereof; and any purchaser of grain, seeds, hay or coal who shall deduct any amount from the actual weight or measure thereof, under claim of right to do so by reason of any custom or rule of a board of trade or any pretense whatsoever, shall be deemed guilty of a misdemeanor and shall be subject to a fine of not less than ten dollars nor more than one hundred dollars for each and every offense.

No agent or broker selling grain, seed, hay or coal shall have authority, under claim of right to do so by reason of any custom or rule of a board of trade, to sell any grain, hay or coal except on the basis of the actual weight thereof; and any contract or sale of any grain, seed, hay or coal made in violation of this act shall be null and void.

The Kansas City Board of Trade, with consistent regard for the ancient private privileges of the elevator operators in that market, proposes to test the validity of the law in the courts, and its attorney already has had a conference with the Attorney-General on the subject.

In the correspondence between the president of

owned by the Royce & Coon Grain Company and used at their establishment at Bowling Green, O., on the T. & O. C. Ry. It is loaded with 268 bushels of oats.

The elevator shown in the picture has 30,000 bushels' storage capacity, and is one of eight operated by the Royce & Coon Grain Company from the Bowling Green general office. The others are at the Main Street Mill, on the T. & O. C., Tontogony (two), on the C. H. & D., and Dunbridge, Portage and Sugar Ridge, on the T. & O. C. A. E. Royce is president of the company, Frank Lehmann, vice-president, and D. B. Noyes, secretary-treasurer. The company handles flour, feed and seeds, as well as grain, and makes a specialty of kiln-dried corn and kiln-dried meal.

The terminal elevators of Minneapolis are taking cut licenses as public elevators, and will be operated under state supervision as provided for in the state public elevator law as modified by the legislature of 1909.

The Civil Service Commission will hold an examination at Washington on September 22 of candidates for appointment to \$1,200 to \$2,000-positions as assistants in grain standardization section of the Bureau of Plant Industry of the Department of Agriculture. Candidates should have had an agricultural training and be familiar with laboratory and field work, and classes and varieties of cereals.



[From Farmers' Bulletin 362.]

**HOW TO GET RID OF LOW GRADE HAY.**

BY HARRY B. MCCLURE.

Scientific Assistant, Office of Farm Management, Bureau of Plant Industry.

How to dispose of low-grade hay is a vital problem with everyone who handles this class of hay, and every dealer has more or less of it, usually more low-grade hay than any other kind. The shippers, receivers, and dealers can help very much in solving this perplexing problem. The country buyer and shipper, especially, can help very materially and should use every fair means in his power to lessen the trouble caused by low-grade hay. The first step in the right direction is for the producer to learn the different grades of hay. It is just as important for him to know the grades of hay as it is for the city buyer.

Too many farmers claim always to have good hay, no matter how late it was cut, or how much foreign material, weeds, etc., it contains, or how inefficient was the method of curing. Hay in the city markets sells on grade, and it was found out long ago that this is the only way to sell hay successfully. This being true, why not buy hay in the country according to its grade? There is no good reason why if this practice will work in the city it will not work in the country. Country buyers in many localities buy hay the year round, and the subject of grade is either not mentioned or if it is most of the hay is classed as No. 1 in order to make a sale.

The writer has visited a number of farms where the hay consisted of perhaps one-half timothy and the remainder made up of red clover, alsike clover, redbud, Kentucky bluegrass, wire-grasses, and weeds of various kinds. When the producer is informed that the market does not want that kind of hay, he replies that he has been growing just that kind of hay for a number of years and that buyers have always taken it, and that it sold about as well as any in the neighborhood. This shows very clearly that the average producer does not know the true grades of hay, having sold inferior grades of hay for the better grades for so long that he thinks there is no reason why he should make extra efforts to grow hay that is free from other grasses and weeds and cut it at a certain time and cure it in a certain way.

If hay sells on grade in the country the man who has the poorest hay will receive less than he does now. At present the man who has choice hay receives less than it is worth on the market, and part of the profit which the shipper makes on the good hay must go to make up for the loss on the poor hay. With the present system of buying hay there is not enough difference in the price paid for the better grades in the country; therefore, if the man who has No. 2 hay receives within 50 or 75 cents as much as does his neighbor who has choice hay, he is satisfied and thinks that it is not necessary to take the precautions that his neighbor did in order to get a slight advance in price.

**HOW TO BUY HAY.**

A firm in Illinois buys hay somewhat according to its grade. It buys a great deal of new hay as soon as it is in good condition to bale, and has a sort of sliding scale, paying the highest price for the hay that is cut early and properly cured. The price is lowered for that which was cut as it approached maturity, depending on the number of days the grass stood after the proper time for cutting. The farmers like this way of selling their hay, and make special efforts to cut it in time to secure the extra profit which the higher price paid at the beginning allows them. This way of selling is successful because farmers have learned the grades of hay and know that they must have choice hay in order to secure top prices.

The causes for hay being graded low, such as its being cut too late, the presence of weeds and fine grasses, and improper methods of curing and baling, can easily be remedied. When intelligent farmers produce low-grade hay it is not on account of the reasons just stated, but because of rains during the haying season. The ordinary methods of curing hay in wet weather usually result in a product that has

but little feeding or market value. There are methods of curing hay in wet weather by which a fair grade can be obtained, and its increased value will more than pay for the extra labor involved. The subject of curing is a large one and details of methods cannot be given in this paper.

**VALUE OF LOW-GRADE HAY.**

As long as the present system of buying is in vogue, just so long will the problem of how to dispose of low-grade hay remain unsolved. Therefore, the first thing to do to keep low-grade hay from going to market is to make a readjustment of the price paid for it in the country, so that the different grades will correspond more nearly with those for which the hay is sold in the city. If this system is adopted it will aid materially in decreasing the production of low-grade hay. If the poor hay does not go to market then the question arises, What shall be done with this kind of hay? Low-grade hay is much more valuable to the producer than to anyone else if he will feed it on his farm. This is true, first, because he will save the cost of baling and hauling, and, second, because a ton of timothy hay contains fertilizing elements to the value of about \$6. If fed and the manure is well taken care of and returned to the soil at least one-half of the fertilizing elements will become available for the succeeding crops.

Low-grade hay makes a fair roughage for idle work stock and other stock that are being "roughed" through the winter. After getting considerable cut of the hay by feeding, there is still about \$3

**A WASHINGTON ALFALFA MILL.**

One can go scarcely anywhere in "the West" of today without becoming infatuated with or doing honor to that marvelous plant of the "dry feet," alfalfa, the great money maker of the "semi-arid belt" and the new irrigated lands which nowadays are the last of the acres Uncle Sam has to give away, and, to do it, violates his own laws by running a lottery which he forbids his citizens to conduct for a similar purpose. And why not honor this generous forage plant that has come to us from the highlands of central Asia, when the records show that it is the best forage plant we have and that the states which grow alfalfa are the best hay producers of the Union?

Not only is alfalfa prolific, but because it is prolific and because of its high feeding value for hogs, stock and for poultry, it is the greatest money maker of all the forage plants. But it has been found that the money in alfalfa is not in the hay so much as in the meal; for it is said that when fresh alfalfa hay is worth \$7 a ton, alfalfa meal is worth \$27; alfalfa hay \$20; clover hay \$14; timothy hay \$10; cowpea hay \$20; wheat bran \$23; and shelled corn \$20. And this is the reason the alfalfa hay is going to the mills rather than to the feeding pens in the rough.

In the heart of the best alfalfa area of Oregon we have the little town of Echo, in the northwest corner of Umatilla County and on the Umatilla River. The district has long been producing alfalfa



HENRIETTA ALFALFA MILL AT ECHO, OREGON.

worth of plant food to return to the soil. As a general thing, selling crops from the farm does not represent the highest type of farming, and it is only under certain conditions that it is profitable without lowering or seriously affecting the productivity of the land.

**SMOTHERED IN GRAIN.**

A telegram to the press from Oxford, O., August 19 says: "Marian Davis, aged 12 years, daughter of Owen Davis, a grain dealer living at College Center, Ind., five miles from here, was smothered to death in her father's grain elevator. The little girl, with a companion, was playing in the elevator, and Marian had climbed into a bin containing about 500 bushels of wheat. A large galvanized iron chute connects with the bottom of the bin and is used for filling freight cars. Employees of the elevator, not knowing that the children were in the building, started to load a car. Marian was caught when the wheat began to move, and was dragged into the chute. Her playmate ran down stairs and gave the alarm, but the child was dead when taken out."

J. Edward Taylor, Utah State Horticultural Inspector, reports that progress has been made in the elimination of the alfalfa weevil from the fields of that state, and expressed the hope that the coming of the weevil may prove to be a blessing in disguise; for one of the ways of combating the present alfalfa weevil is to cut the crop early and cultivate the soil so as to stir up the dust which then kills the weevil. In this way, a general cleaning up of the alfalfa fields takes place, which not only kills the weevil, but cleans the land and improves its condition generally.

and in such quantities that the Henrietta Milling Company of Portland some time ago built here the feed and alfalfa mill shown in the picture, with a milling capacity for alfalfa of 40 tons per day. In addition to these older resources of hay it has lately been announced that the Western Land and Irrigation Co. is at work on a new irrigation project, in which 15,000 acres of choice alluvial sage brush lands are involved, of which the company owns 3,000 acres which are being placed under the plow. The lands lie on the south and west of the Umatilla River and have a deep soil and natural drainage into the Umatilla River, which is a very important factor in the project. Water is taken out of the Umatilla River about a mile above Echo. The canal is 30 feet wide on the bottom for the first six miles, and for the next six miles, to the main diversion point of the laterals covering the lands, it is 20 feet on the bottom. The company has water in the canal and laterals this year sufficient to irrigate quite a body of land, and with the completion of the 400-foot dam this fall it will be in a position next year to cover the entire project with ample water for irrigation.

So it would seem the Henrietta Mill is well located. Physically speaking, it is well prepared for business. It is equipped with a Williams Alfalfa Mill, the principle of which consists in rows of hammers attached to a cylinder loose enough to allow free play and revolving inside a steel case at the rate of 2,000 revolutions per minute. This case is perforated with 3-16-in. holes through which the finished meal is forced and then taken by suction to a Cyclone Collector, and thence sent to the packer. The meal is packed by an auger-packer into sacks of a uniform weight of 60 pounds each; and it is then ready for shipment.



The Henrietta Mill is so located that particular pains can be taken to use only the cleanest and lightest hay; for the climatic conditions of the Um-atilla country are such that it is possible to cure the hay in one day, so that it retains its bright green color, and when the meal later is dampened for use its original freshness at cutting is restored. It is also remarkably free from dust and dirt.

The Henrietta Milling Company has its headquarters at Portland, Ore., where also it has a large feed mill. The company has a feed and alfalfa mill at Wapato, Wash., also, similar in style and capacity to the one at Echo. There are no better mills on the Pacific Slope. The company is managed by W. H. Daughtry, president; Fred Muller, formerly of New Orleans, secretary-treasurer; and J. E. Murphy, manager.

[For the "American Elevator and Grain Trade."]

## DIPLOMACY AT THE ELEVATOR.

BY GUIDO D. JANES.

Art Attrition was as blue as could be because he wanted to swear and had never learned the art of doing it. Yes: he was desirous of employing a lot of naughty words and heap them upon farmer Hiram Scourer. Why?

Simply for the reason that the said farmer was in the habit of hauling to Art's elevator a lot of carelessly cared for and "doped" wheat; thereby causing trouble from the moment it got into the elevator boot. Art tried dockage on him all the time but that did not mend matters entirely. No; for



"TRY A PHYSICAL DEMONSTRATION."

the tiller of the soil was endeavoring to get-rich-quick and was studying tricks in deception as well as facts in husbandry.

"I don't know what to do," the elevator man remarked to Bob Altstein, his buyer, one morning. "That old guy, Hiram Scourer, is a grafter. We have to accept his grain, for he raises more than any ten farmers around this vicinity. I wish I was independent enough to tell him to go to a hot country with his grain. The careful farmer, myself, you and all humanity, have to suffer indirectly on account of his grafting."

"Why don't you take him into one of your grain cleaners, and scour out his character," suggested Bob.

"I was afraid to. I did suggest, however, that he go to a grain hospital and have an operation per-

formed upon his disposition, to remove the screenings. He only blessed me out, and called me a grain of durum wheat."

"Then try a physical demonstration upon the rascal."

"How?" cried Art.

"Easy as rolling off a two-thousand bushel scale. I have friends in both the milling and grocery business. They will help. We will procure some of Hiram's bum grain, have it ground into flour; put into the said flour the screenings that have been removed from the wheat, pack the stuff into a barrel; haul it over to the grocer's and then sell it to the said Hiram."

"Good plan. Do it. I'll back you up."

At once then the plan was put into operation. Several bushels of the worst wheat obtainable from the elevator was secured; taken over to McDougall's flour mill; doped up after it was made into flour; after which in barrel form it was carried down to Hughes's grocery store. Two days later Hiram bought it.

The stuff was now hauled into the country to the Scourer homestead, where it was made into bread by a new hired girl. After which all sat down at the dinner table to eat said bread.

Hiram took a bite of the article and began to chew it. He soon paused, though, in the operation, for his mouth and teeth sounded as though they were traveling over a gravel road.

"Good gracious!" he cried. "This is not bread that I am eating; it is a crude imitation of such." Here he grabbed up the stuff and threw it out the window. He also tossed the servant through the same opening, and found fault with his wife for permitting such articles of diet to sojourn on their table.

After doing this, and finding out the flour and not the cook was in error, he jumped on a horse and sauntered to town. Reaching the place he sought out the grocery store that sold him the barrel. There was blood in both eyes.

"Say, Hughes," he began, breaking into the place. "You haven't a lick of sense."

"Why?" asked the merchant.

"Yes, why?" laughed Art, rising up from behind a barrel.

"Because," returned the irritated farmer, "I bought some flour here, and instead got some gravel roofing. I obtained stones instead of a high patent—adulteration for honesty."

"Now don't be too harsh on Charlie," added Art still in a smiling condition. "He is not to blame. We are, my buyer and myself. We just played a joke on you. We wanted to be humorous in your presence. That flour you just purchased from this store was made from wheat you raised. We wished to prove that even as good a man as you sometimes slipped up on grain raising. We did it in a good natured manner." (Laughs.)

Hiram hesitated a moment, then broke out into a slight smile.

"Guess I'll have to come in on the joke, then, too," he said sweetly. "But truly I did not know my wheat was that bad. Occasionally I doped it up when times were dull; but I did it merely to keep up my reputation. I feel quite contrite now. In the future I'll do better."

"I am glad you will," laughed Art.

"So am I," said Hughes.

"Here, too," put in Bob.

"I wish to add though," remarked the farmer, "that if you had not pointed out my faults in a joking and good natured manner, there would have been no reform on my part. Instead, there would have been bloodshed."

Removing the blood then from both eyes, Hiram withdrew, mounted his steed and left the locality.

The oat millers say this year's crop is the heaviest seen in many years. One Iowa mill bought one lot which tested 36 to 39 lbs. to the measured bushel, or about 10 lbs. heavier than the best oats averaged last year. Test weights at Chicago have run 39 lbs. to the bushel. Advices from the Northwest were of the same tenor, showing large yields per acre and heavy test weight.

## HANDLING WHEAT IN GREAT BRITAIN.

In response to the request of the Minister of Agriculture, T. A. Coghlan, agent-general of the Commonwealth of Australia at London, has forwarded a report on the "Bulk Handling of Wheat in Great Britain," which is reproduced as a special bulletin (No. 21) by the Department of Agriculture, Sydney. In summarizing the information obtained the agent-general says:

All the English ports to which foreign and colonial wheat is shipped receive it in bulk and in bags, about 60 per cent of the wheat imported being in bulk and 40 per cent in bags. In London, Bristol, Glasgow, Liverpool, and Manchester, the larger proportion is received in bulk, while at Hull the proportions are about equal.

At all the principal docks where wheat is imported except Hull, there are elevators, which enable the



"IN THE FUTURE I'LL DO BETTER."

wheat arriving in bulk to be discharged from the ships with greater rapidity and less expense than the grain imported in bags. At Hull the wheat arriving in bulk is discharged into lighters and carried to the mills, of which the greater number are so situated that railway transit is not required. On the other hand, the railways possess practically no facilities for handling grain in bulk, and wheat which requires railway transport has to be bagged at the port. The dock-owners provide up-to-date machinery at the docks for this purpose, the cost of which has to be borne by the merchant. In some cases, when wheat arrives in bags, these are not strong enough to bear railway transit, and the wheat has to be re-bagged. The quantities of imported wheat handled by the railways is, however, comparatively small.

Ship-owners prefer that wheat should be sent in bulk, as there is economy of space, the discharge is more rapid, and is paid for by the merchant. The cost of freight is lessened by shipping in bulk, as the bags are paid for on the other system.

The merchants prefer the system of shipping in bags. Their chief reason appears to be that the wheat in bags is weighed in small lots of about 4 bushels, and on each occasion the merchant gets the benefit of the draft required to turn the scale, whereas bulk wheat is weighed in lots of one ton or more. They regard the slower rate of discharge from the ship as an advantage, as it gives them more time to dispose of the grain. In the port of London, the cost of discharging wheat in bags is paid by the ship.

Factors in Mark-lane believe that Australian wheat in bulk would not command quite so high a price as in bags, and some corn merchants consider there is some danger that the condition of the wheat would be adversely affected by transport in bulk;



that there would be more danger from attack by weevils, and that the wheat would be more likely to suffer from natural heating. The damage done to wheat in bags from these causes is more confined, and can be located more easily.

Messrs. Berry, Barclay & Co., a firm of London merchants interested in the Australian grain trade, believe that the extra sea risks, if it were handled in bulk, would enhance the rate of insurance. Some of these objections must be considered more or less fanciful, seeing that Argentine wheat, which has somewhat similar characteristics to Australian, is brought here in large and increasing quantities in bulk, and I can find no complaints in regard to the manner in which it is handled. On the whole, there appears to be a saving of about 2s. per ton in this market in bulk shipments, but I should be disposed to say that otherwise there is little to choose between the two systems.

### LOOK OUT FOR LOW GRADES.

Dealers, at least in Ohio and Indiana, are not starting in right with low-grade stuff, and not only are they losing money now but they are making a bad precedent for the future. The receivers certainly are throwing out enough warnings, of which the following are samples, to put country buyers on their guard:

#### AS TO LOW-GRADE WHEAT.

We are just about sick with "off-gradeism and discountism." And we presume many shippers are bothered with the same "disease." Its attacks have been more severe on handlers of wheat this season than ever before, but in many cases the farmer has had a very light dose of it, and the shipper who paid him way up for poor wheat has had a bad attack. It is no laughing matter, this disease we speak of, and in addition to losing money for many it also makes enemies of old friends. Don't blame us or Toledo for everything. Remember, it has been a long time since Ohio and Indiana raised such miserable wheat as they have this year. Also remember that it takes two to make a bargain—a buyer and a seller, and that Toledo up to now has received more than her share of poor stuff and naturally it has affected the price, because some of the best buyers got filled up and are still carrying and running the wheat, and also that they dare not put out a hedge by selling a future because these futures might advance and the off-grade wheat hold steady or decline.—J. F. Zahm & Co.

Shippers! Be careful buying low grades. Don't be too liberal in buying poor wheat. There is a lot of it in Indiana and Ohio. Some of it is fit only for chicken feed. The difference between two red and low grades has widened in all Western markets. Millers want the good, so do mixers. Chief Culver says this is the worst season for low grades in many years. Blight caused most of the trouble. Tombstones are all right in graveyards, but not in wheat. Wheat which is unfit for milling sells at a big discount in all markets, more than in an ordinary season. The fault is with the wheat; blame Providence rather than the dealers at the terminal markets.—C. A. King & Co.

#### LOOK OUT FOR CORN.

Receipts of shelled corn at Pittsburg have been light. All arrivals are readily placed at quotations named below. We hear of some complaint regarding the quality of corn arriving. Shippers should be careful about the quality of corn loaded. Good, sound shelled corn is wanted, while off grade stock is hard to place.—Hay & Grain Reporter.

#### KRESS ON HANDLING OATS.

Our present oats crop has materialized, and with it comes many worries and trials for the country shipper. Unfortunately, in many sections the quality is bad. Recent rains have caused them to become stained, damp and tough.

It is the handling of such crops that requires a distinct knowledge of the grain business. The intelligent handling of grain involves discreet and discriminating purchases at proper grades, and equally discreet and wise disposition in favorable markets.

The question is whether or not the shipper is carrying out this practice. Being in close touch with him, I am inclined to believe that many of the boys are allowing the farmer to dictate what his off grades are worth. This can result in only one thing—loss.

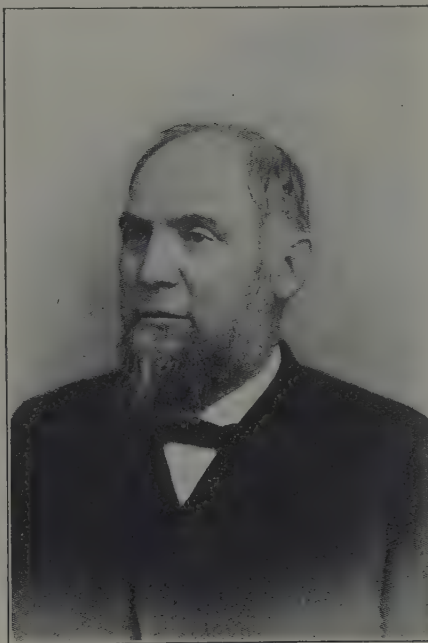
In stopping off to see a country shipper the past week, I was informed that he was paying thirty-five cents to the farmer for oats. He also told me of an experience he had with the first car he shipped out. His cleaning showed a loss of about forty-five bushels, and when his car arrived at destination, a 3-cent discount was made on account of being off grade. He sold the car at 37 cents his track. His actual net returns on this investment showed only 31 cents f. o. b. his station. If this shipper keeps this up, the length of time that he is to remain in the grain business will be governed entirely by the size of his bank account.

While the case just cited is only one, will say that I know of many more just as bad, and in some instances worse.—Harry W. Kress' White Letter.

### GOV. GLICK.

Men of all ages have admired their national Cincinnati who serve their country at their country's call, return again to their vocations, and again if need be, like Cincinnati, leave their plows in the field to respond once again to the public need. The greater the patriot, the more ready the response and the certainty of it, however simple the service required. All Kansas recognizes such a man in Gov. Geo. W. Glick, whose latest but, let us hope, not last, service to his state was to act as a member of the late board sitting for a day or two at Topeka to fix the official grades of grain to govern the inspection of the crop of 1909 in that state—a simple and yet important service to call from his home a man who has served Kansas as governor, legislator and representative on numerous important commissions and occasions.

The scion of a race of men who came to America from Germany during the Colonial era and who fought England in our Revolution and again in the second War for Independence in 1812, Geo. W.



GOV. GEO. W. GLICK.

Glick was born at Greencastle, O., on July 4, 1827, and was raised on his father's farm near Fremont. Obtaining a good common school education, he studied law and was admitted to the bar of Ohio at Cincinnati. He returned to Fremont to practice his profession, but the West claimed him for its own; and in 1859 he located as a lawyer at Atchison, Kan., which is still his residential city. He at once centered on a large practice, which he continued to enjoy until in 1874 an affection of the throat forced his retirement. In the meantime, although a Democrat, he was successful in politics also, having been elected a member of the state legislature of 1862 without opposition and re-elected in '63, '64, '65, '66, '68, '76 and '82. As a member of the house he was able to impress himself upon the statute book in a series of laws that have been of immense value to the state, both morally and otherwise. In 1876, although the house was strongly Republican, he was made speaker *pro tem.*, acting as such with distinguished ability and fairness. In 1882 as a candidate for Governor, he defeated the distinguished John P. St. John by 8,079 votes, in the face of a Republican majority of 52,000 for his predecessor. His administration was entirely creditable to him. The State Railroad Commission and several other important state utilities were created during these years at his suggestion and certain wholesome reforms inaugurated, the beneficent influence of which still remains. During Mr. Cleveland's two administrations Gov. Glick was pension agent at Topeka,

disbursing during those eight years no less than \$85,000,000 to old soldiers, among whom he must himself be counted; for he served in the 2d Kan. Regt. on the border during the Civil War and was wounded at the battle of the Big Blue. He had enlisted to go to Mexico also, in 1847, but the war was over before he saw any active service. He represented Kansas as commissioner at the Centennial, Columbian and Trans-Mississippi Expositions.

For thirty years Gov. Glick has been engaged in farming and in raising thoroughbred Short-horn cattle. His farm of 640 acres, known as Shannon Hill Stock Farm, has a reputation throughout the West for fine stock, and has supplied that region with many of the best strains known to the American Short-horn Herd-book. He is now, and has been for thirty years, a member of the State Board of Agriculture, and served as its president several terms. He is a ready and vigorous writer, and has contributed many valuable essays on agriculture, stock-raising and kindred subjects to various periodicals and public meetings,—a record that fully justified the demand by the Governor of Kansas made upon him to serve as a member of the Grain Grades' Commission.

### GEO. F. REED DEAD.

Geo. F. Reed of Boston, one of the largest grain exporters of that city as well as one of the heaviest dealers in New England, and widely known by the trade throughout the country, died at his home at Wellesley Hills, near Boston, on August 24. Mr. Reed's death came at the end of nine months of illness. He was 46 years of age and he has left a wife and two children.

"Born in Roxbury, Mr. Reed received his education in the city of Boston," says the Traveller, "and when a young man started in business with his father, the firm bearing the name of Reed, Hawkins & Reed. This partnership was dissolved, and the young man and his father conducted the business alone under the name of Reed & Son. Then Mr. Reed went into the brokerage business. The present firm will be continued under the name of the George F. Reed Company, according to the announcement made by Matthew Bengtson, who has been with Mr. Reed for some years.

"It was due to Mr. Reed's foresight and energy that, on February 3, 1906, the first full cargo of grain was shipped from Boston for Italy. Others have since been sent to that country and to Greece. In one instance Mr. Reed went abroad and personally arranged for the sale of the cargo. Mr. Reed always had the interests of Boston port at heart, and was prominently identified with all movements for the betterment of the port and the city. As a hard worker, closely allied with the best interests of the city, he will be missed."

Mr. Reed will be remembered as one of the leading spirits at several recent meetings of the Grain Dealers' National Association, in whose work he took a keen interest.

### DURUM WHEAT DAY.

Gov. Burke of North Dakota has issued a proclamation setting apart October 7 as "Durum Wheat Day" for 1909. He desires to encourage the consumption of durum wheat flour, and in his proclamation calls on the people of the state to eat on that day bread made from that kind of flour only, as a demonstration of the "superiority of durum wheat flour" and as an encouragement to its production, etc.

Iowa crop bulletin says light frosts were observed on the morning of August 29 on the low ground over the northern half of the state, but it is not believed much damage was done.

George Washington Walker, a flour and grain broker of Sydney, N. S. W., has been in Minneapolis, studying American methods of handling grain. In Australia grain is handled entirely in sacks and shipping it in bulk and storing it in elevators is not practiced as yet, although much and often talked of.



[From the Railroad Age Gazette.]

## GRAIN HANDLING IN THE UNITED STATES.

## I.

BY SAMUEL O. DUNN.

Western Editorial Manager, Railroad Age Gazette.

Vastly the major part of the grain grown in the United States has for many years been transported to market in bulk. That is, it has been run directly from the spout of the threshing machine into the farmer's wagon, and then either has been hauled directly to the nearest country elevator or has been shoveled into the farmer's granary and subsequently shoveled out of it into wagons, hauled to the country elevator, loaded from the elevator into a car in bulk, hauled in bulk to the terminal elevator, transferred there in bulk, and finally exported or delivered to the miller in bulk. The practice of handling grain in bulk has for many years prevailed so exclusively in the great grain producing states of the Middle West and of the more easterly states of the Northwest, such as Minnesota and the Dakotas, that the farmers, grain dealers and railway men in that part of the country are almost unacquainted with any other method, and when they hear any other described they are pretty sure to condemn it as slow, expensive and primitive. Nevertheless, an older and different system of grain handling prevails in a large part of the world.

The wheat crop of Argentina, which amounted in 1907 to almost 156,000,000 bushels, was sent to market mainly in sacks.\* Similarly, the large wheat crop of the states of Oregon, Washington and Idaho, which in 1908 amounted to over 42,500,000 bushels, was moved to market mainly in sacks. Efforts have been made for years to introduce the system of bulk shipment in the Pacific Northwest, but they have been only partially successful. It is evident that there must be some reason for this adherence in a large part of the grain growing world to a method of handling which shippers and railway men elsewhere regard as costly and primitive.

The way in which grain is handled, whether in bulk or in sacks, affects its transportation by rail in various ways. It is apt to affect the rate on grain. It affects the tonnage of it that can be got into a car, and also otherwise affects the cost of rail transportation. It has a relation that is not generally recognized to the subject of car shortage, and to the kind of cars used in handling grain.

In view of facts such as the foregoing, it is thought that an article dealing with the two methods of handling grain might not be uninteresting to the readers of this paper.

The grain elevator system, which is now one of the most characteristic parts of the machinery of commerce in the United States, has grown up largely in response to the same demand, and has been given its present form largely by the same conditions that have stimulated and shaped the growth of the American railway system, with which it has always been very closely interwoven.

The Chicago Board of Trade was organized in April, 1848. Its object was to establish a point where buyers and sellers of grain could meet to transact their business. At that time wheat was hauled to Chicago in wagons from a radius of 100 miles around and was sold in the Chicago market at 40 cents a bushel. Not only were there no railways to transport it, but roads and even bridges were wanting, and the farmer's profit from his crop, of course, was negligible. The issuance of a charter to the Illinois & Wisconsin Railroad Company in Illinois in 1851 marked the beginning of the development of the so-called "granger railways." The Illinois & Wisconsin is now a part of the Chicago & North-Western system. As the various railways pushed out from Chicago the grain dealers in that city sent buyers to the country stations, who were either merely agents for the Chicago merchants or did business on capital furnished by them. In either case the grain bought at the local station was usually purchased either directly or

indirectly on the account of the Chicago merchant and shipped to him.

No one can say just when or where the first grain warehouse bearing a resemblance to the modern elevator was built. It can, however, be stated with assurance that in the early days the farmers of the Middle West hauled their grain to the local railway stations in sacks, and that the primitive structure which then served as an elevator had a hopper into which the grain was poured directly from the sack, after which it was elevated by an endless chain of buckets and deposited in bins, from whence it was discharged by gravity into cars on the adjoining tracks, horse power being used for the elevation of the grain. Subsequently, some inventive genius devised a scheme by which the hopper was located in a pit at the bottom of the elevator, and the wagon was driven over it and dumped by gravity. This marked the beginning of the end of the handling of grain in sacks in the Middle West.

## COUNTRY ELEVATORS.

Elevators were built rapidly at numerous country stations along every line of railway, and were well patronized from the first, because they met the needs of all directly concerned—the farmer, the grain dealer and the railway. By enabling the farmer to deliver grain in bulk they saved him the expense of buying sacks. If his grain came from the field wet, the elevator man had facilities for preventing it from spoiling, that no individual farmer could provide. Grain grown in the Middle West, it is said, must sweat somewhere. If it does not sweat in the sack it is apt to sweat in the bin, and if it does not sweat in the bin it is apt to sweat in the flour. The elevator proprietor had facilities for preventing the grain from spoiling by sweating, that the farmer did not have. In former years in the Middle West the farmers were all poor and needed to realize cash from their crops as soon as they were harvested. The elevator was not only a facility for transferring grain from the farmer's wagon to the car, but was also a storehouse. The fact that the dealer had a place to keep the grain if the market was unfavorable after he bought it, enabled him to take it as fast as it came in, and then hold it for a good price, a thing that the farmer with his lack of financial resources could not do.

The presence of elevators on its lines was advantageous to the railway. Grain could be accumulated in the elevator until there were several carloads and then poured rapidly into the cars. This made delays to rolling stock less than when the grain was shoveled from the farmer's wagons into cars or was transferred direct from the farmer's wagon to the cars in sacks. There was a time when there was a number of little flat warehouses along the railways in the Middle West, some of them having a capacity as small as 1,000 bushels. It took two, three or even four days to scoop enough grain from one of these to load a car. On the other hand, the ordinary country elevator had a capacity of several thousand bushels; a modern country elevator usually has a capacity of no less than 25,000 bushels; and ten to fifteen cars can be loaded from it daily. Where sack grain is accumulated in flat warehouse before being loaded on cars, the delay which loading it causes to railway equipment is less than the delay that would be caused by shoveling it from a wagon into a car, but it is substantially greater than the time taken to load cars from an elevator. In seasons of heavy railway traffic the elevators afford a place where large quantities of grain can be stored awaiting cars; and therefore, it is contended, the elevator system tends to reduce the congestion of traffic at such times.

## TERMINAL ELEVATORS.

What has been said relates mainly to the country elevators. The advantages to the farmer, the shipper and the railway of the terminal elevators at the large markets were early recognized to be equally great. The grain as it came from the farmer in the Middle West often needed to be dried, cleaned, etc., to render it fit for export or for milling. For example, occasionally during a wet season, there is a soft corn crop in Illinois. Corn in this condition cannot be transported far without spoiling. It is

necessary to get it as soon as practicable where it can be properly treated, and this usually can be done only in a large terminal elevator, for the country elevators are seldom equipped with machinery for any purpose but the transferring of grain—elevation properly so-called. Of course the existence of facilities for so treating the grain as to keep it from spoiling inures in the long run to the advantage of producer, carrier, grain dealer and consumer.

Usually when grain was bought its ultimate destination was unknown. It is not known whether finally it would be ground into flour at Minneapolis, or St. Louis, or Chicago, or shipped to the Atlantic seaboard, or sent to Europe. The merchant, therefore, needed a place to keep the grain while he was finding a buyer for it. The terminal elevator served this purpose. It was often advantageous to mix a lower grade of grain with a higher grade in order to increase the value of the former, and the elevator was equipped with machinery for this purpose also.

The establishment of terminal elevators on its lines at the large markets was extremely desirable for the railway. When a terminal elevator was built on the lines of one road, the grain moving to that elevator was pretty sure to move over that road, giving it traffic. When the transportation of grain began before its ultimate destination was known, it was pretty sure to have to be held in storage somewhere, and if, after it began to move, it were not held in storage in a terminal warehouse it would have to be held in the railway's cars; and a car can commonly be used to better advantage as a transporter than as a warehouse. A great deal of grain had to be transferred at terminals from cars of one railway to cars of another or to boats on rivers, canals, the Great Lakes and the ocean, and these transfers, of course would be accomplished with least delay to the cars through an elevator. Both the country elevator and the terminal elevator were an advantage to the road in that they enabled it to load its cars to their cubic capacity with the lighter grains, such as oats, which could not be done when grain was shoveled into the car or stowed in it in bags.

Owing to these and other conditions, the railways in the Middle West from the start did all they could to stimulate the development of the elevator system. In some cases they built and operated both country and terminal elevators themselves. In other cases they furnished the capital for the organization of companies which built and operated the elevators. In other cases they built elevators and leased them at low rentals to grain dealers. In still other cases they leased land to private individuals for the construction of elevators at purely nominal rentals—at \$1, \$2 and \$5 per year. Competition between the roads was such that it is believed the instances were few where elevators were built entirely with private capital and ground belonging to railways was leased for what it was worth. The evidence taken by the Interstate Commerce Commission in the so-called Peavey case, which appears in the various reports of the Commission under the title "In the Matter of Allowances to Elevators by the Union Pacific Railroad Company," throws much light on the relations that long have existed and still exist, between the railways, the grain dealers and the elevator operators. This testimony shows that grain is usually bought in the country by the manager of a country elevator. It is weighed, taken into the elevator, and paid for, and the transaction is completed so far as the farmer is concerned. Occasionally the farmer puts his grain into the elevator subject to order for future shipment, or sells to what is known as a "track buyer," in which case the grain is delivered directly from the wagon to the car. The owners of country elevators sometimes have no connection with any terminal elevator, in which case the grain is sold "f. o. b." at the country station and consigned to the owner in care of some commission house at a central market. In most [many?] cases, however, the country elevator is one of a string of elevators that is operated by some concern which also operates large terminal elevators and buys and sells grain. Ordinarily such concerns keep their business as operators of elevators and their business as dealers in grain nominal-

\*We think the author is in error, at least in a degree; since more Argentine grain is shipped now in bulk than in bags and the quantity of bagged grain is steadily decreasing.



ly separate. For example, the Peavey Grain Company runs its elevator at Kansas City, Mo., under the name of the Midland Elevator Company, and its elevator at Council Bluffs, Ia., under the name of the Omaha Elevator Company. Similarly, the Armour Grain Company operates its elevators under the name of the Armour Elevator Company, and it is also pretty well understood that it controls the Neola Elevator Company. Usually a railway works on its line with a single large elevator company. For example, the Peavey Grain Company operates a large number of country elevators on the Union Pacific system and the Rosenbaum Grain Company on the Rock Island and some other roads.

### EAR ROTS OF CORN.

Bulletin No. 133 of the University of Illinois Experiment Station, on "Ear Rots of Corn," is an exhaustive study of a subject touched upon a couple of years ago by the authors, Prof. Thos. J. Burrill and Jas. T. Barrett, which is of special interest and importance at this time, the corn harvest being upon us.

At husking time, or before, all over the corn belt, certain ears of corn are found in the field covered with and penetrated by a whitish or sometimes a pinkish mold. The affected ears are light in weight and present all the evidences of dry decay, or rot. The kernels also are shriveled more or less, are dark in color and light in weight.

The extent to which this injury affects the total corn crop is not clear, but the damage aggregates probably much greater than estimated. In 1906 in the fields examined by the authors no less than 10% of the ears were attacked, and others have reported as much as 20% of rotten ears, while reports of 10 to 15% are not unusual. On the whole, then, the authors estimate that the dry rot destroyed 4.5% of the Illinois corn crop of 1906 and 2% of that of 1907, which expressed in dollars would mean \$5,620,000 in Illinois in 1906 and at least \$2,000,000 in 1907. If this is true in Illinois, what must be the total for the entire corn belt?

It is now known that this rot is caused by the presence of at least four different parasitic fungi, the *Diplodia* and three different *Fusarii*, which attack the corn through the stalk and the husk. Like all fungi of this sort, the disease is perpetuated by careless farming which permits the infection to remain on the land, in the abandoned stalks; and so, without attempting to repeat here the authors' life history of the fungi in question, we may first recommend the reading of the Bulletin by grain dealers and farmers, and then content ourselves with quoting the authors' recommendations for prevention, as follows:

The diseases of corn (maize) described in this Bulletin should not be confounded with corn smut which is frequently seen upon the ears as well as on other parts of the corn plant. This is easily recognized and is well known on account of the large outgrowths of a black or sooty substance which when dry readily falls into fine dust. The ear rots under discussion are very different and are best characterized as moldy in appearance. There is a white or pinkish, cobwebby, closely adherent growth on and in the husks, silk, grain, and cob or any of them. The affected ears are never perceptibly dusty, but later become brittle or friable and merit the name sometimes applied—dry rot.

The life history of the fungus (*Diplodia Zeae*) causing most of these ear rots (about 90 per cent) has now been sufficiently worked out, as detailed above, to make it possible to recommend preventive measures with confidence in the prescriptions. This fungus lives as a parasite on the ears of the corn plant and apparently on no other portion of the plant. At first it was natural to suppose that a seasonal infection must be due to the wintering over on the old diseased ears, and that in all probability a careful collection of these at the time of husking would do much towards the reduction of the malady in the field the following year. This may be true to a considerable extent, but the discovery that the same fungus develops abundantly upon the dead stalks, even upon those that have lain on the ground two years and are therefore much decayed, changed materially conclusions upon the subject. It will not be surprising if it is hereafter found that the fungus does sometimes live on other parts than ears of growing corn, neither is it impossible that it develops as a saprophyte on

something besides corn stalks. It can be rather confidently asserted, however, that these things if true at all must be rare occurrences in Illinois corn fields, and that for practical purposes attention may be centered entirely upon the facts now made known.

Little dependence can be placed upon any direct treatment of the soil, any outward application to the plant, any variation in time of planting, any selection of varieties, or other similar matters, though there may be some difference at different times and under special conditions on account of any such variations connected with the soil or with the plant. A few cases, indeed, have been observed where the amount of rot was undoubtedly traceable to some such difference, now one thing, now another. But there is not enough of this to alter the recommendations that can now be made.

It is best, then, to give attention principally if not solely to the active agent which causes the destruction. Rot does not occur, as has been shown, under any circumstances or condition except as it is directly brought about by the fungus, and the fungus cannot start except by its own reproductive methods. Keep the spores away from the green ears and the corn will remain sound. Keep the fields free from the substance on which spores are produced from the beginning of a season for infection, and the crop must remain free from danger in this regard.

Undoubtedly there is some dissemination of spores from the earlier affected ears to sound ones of the same season, but here again the probable amount of loss so caused is small. Practically the new

### DRYING GRAIN.

A grain drier has been patented in Great Britain, which is of the horizontal centrifugal type, made with cylindrical drums and without moving beater blades. In a casing and placed eccentrically with respect thereto like a centrifugal fan, revolves a drum of perforated metal provided with fan blades, which serves to draw a current of air through the drum. Grain is fed into the drum by a hopper and is spread against the sides of the drum by a plate, by means of which the drum is secured to a rotary shaft. A stationary sleeve on the shaft carries a segment of a drum, provided with obliquely placed blades, which guide the grain toward the outlet end of the drum. A flange in the casing protects the cleaned and dried grain from the matter passing through the drum.

### A NASHVILLE HOUSE.

The elevator and general plant of J. R. Hale & Sons at Nashville, Tenn., is a handling house rather than a storage elevator. The elevator proper, occupying the foreground of the picture, has indeed room for 50,000 bushels of grain, but the warehouse to which it is an appendage has space for 200,000



GRAIN ELEVATOR AND WAREHOUSE OF J. R. HALE & SONS, NASHVILLE.

infection comes from the old stalks—those one and two years old—and therefore these must have chief attention in the combat. From this it is easy to see what procedure should be adopted in trying to reduce the rot in, or eliminate it from, the field. Stated in a word, it is carefully to take out of the field and destroy the rot-infected ears at the time of husking, with the view of reducing the amount of the fungus later on the stalks; then to remove from badly infected fields the stalks by low cutting and hauling away or by burning, or better still, by such rotation of crops that corn shall not follow corn within a period of two years. Care should also be taken not to plant corn by the side of an old infected field especially if the latter is upon the side from which come the prevailing summer winds—the south and west.

As corn is commonly cut for fodder or for silage, there may be stumps enough left to carry over too much of the disease, and old stalks may get back again with the manure to a detrimental extent; though by attention to these matters there must be a possibility of causing a decided diminution of the trouble by such early removal of the stalks.

Unless the old stalks with their harboring fungus are effectually destroyed, corn should not be planted again where there has been much of the disease for two years thereafter, nor nearer than 20 to 30 rods, especially on the windward side of an old corn field badly infected one or two years before.

Dayton, Wash., reports that with half of the grain crop of Columbia County at Menoken, Alto, Waitsburg, Dayton, Turner and Whetsone housed, it is evident that at least a million bushels will have to be stored in the open on account of a shortage of warehouse room. This in effect is the statement made by grain dealers at these points.

bushels more, and therefore from a storage point of view is the more important part of the premises.

However, the handling capacity of the elevator is such that the plant, being provided with a pair of private tracks, has a total handling capacity of thirty cars per day. The house is located at Centennial Boulevard and Tenth Street. The firm operates another warehouse at Murfreesboro, Tenn. They deal in grain, hay and field seeds and also in cotton.

### FARM VALUE OF IMPORTANT CROPS.

The *Crop Reporter* gives the average value (based upon prices received by farmers) of important crops in the United States, on dates indicated, obtained from reports of correspondents of the Bureau of Statistics, Department of Agriculture, as follows:

| Date.              | Corn.<br>Cts.<br>per<br>bu. | Wheat.<br>Cts.<br>per<br>bu. | Oats.<br>Cts.<br>per<br>bu. | Barley.<br>Cts.<br>per<br>bu. | Rye.<br>Cts.<br>per<br>bu. | Flaxseed.<br>Cts.<br>per<br>bu. | Dols.<br>per<br>ton. | Hay.<br>Dols.<br>per<br>ton. |
|--------------------|-----------------------------|------------------------------|-----------------------------|-------------------------------|----------------------------|---------------------------------|----------------------|------------------------------|
| July 1, 1908.....  | 75.7                        | 89.5                         | 50.2                        | 58.1                          | 75.4                       | 108.1                           | 9.79                 |                              |
| Aug. 1, 1908.....  | 78.1                        | 90.4                         | 49.8                        | 57.1                          | 74.2                       | 107.4                           | 9.28                 |                              |
| Sept. 1, 1908..... | 76.5                        | 88.7                         | 47.2                        | 56.1                          | 72.3                       | 109.6                           | 9.18                 |                              |
| Oct. 1, 1908.....  | 72.3                        | 90.4                         | 47.2                        | 55.3                          | 74.1                       | 107.3                           | 9.23                 |                              |
| Nov. 1, 1908.....  | 63.5                        | 91.5                         | 46.5                        | 53.7                          | 73.7                       | 108.3                           | 9.22                 |                              |
| Dec. 1, 1908.....  | 60.6                        | 92.7                         | 47.2                        | 55.4                          | 73.6                       | 118.4                           | 8.98                 |                              |
| Jan. 1, 1909.....  | 60.7                        | 93.5                         | 48.1                        | 56.5                          | 73.4                       | 123.2                           | 9.09                 |                              |
| Feb. 1, 1909.....  | 61.4                        | 95.2                         | 48.1                        | 58.3                          | 73.8                       | 129.8                           | 9.27                 |                              |
| Mar. 1, 1909.....  | 64.7                        | 103.9                        | 51.1                        | 59.4                          | 75.0                       | 141.3                           | 9.47                 |                              |
| Apr. 1, 1909.....  | 67.5                        | 107.0                        | 53.2                        | 61.2                          | 77.3                       | 145.6                           | 9.65                 |                              |
| May 1, 1909.....   | 71.9                        | 115.9                        | 55.3                        | 63.8                          | 78.3                       | 148.7                           | 10.12                |                              |
| June 1, 1909.....  | 76.3                        | 123.5                        | 57.4                        | 67.0                          | 81.2                       | 153.4                           | 10.70                |                              |
| July 1, 1909.....  | 77.0                        | 120.8                        | 56.2                        | 67.0                          | 81.7                       | 153.1                           | 10.56                |                              |
| Aug. 1, 1909.....  | 75.2                        | 107.1                        | 50.0                        | 61.2                          | 78.5                       | 137.0                           | 9.74                 |                              |



## THE SPREAD OF PELLAGRA.

Montgomery, Ala., on August 24 reported five deaths from pellagra in Butler County, three persons dying, five new identified cases under observation and 100 cases in Clark County.

Peoria, Ill., on August 24 reported more than 50 cases in the Illinois General Hospital for the Insane at Bartonville and 50 more under suspicion of the disease.

One death of pellagra at the Cook County Insane Asylum at Dunning was recently reported—complicated with tuberculosis.

What is pellagra? In view of the fact that this mortal disease, discovered in 1735, is clearly increasing in the United States, and that it is attributed to the use of [moldy] corn in its various forms of human food, the subject is one of peculiar interest to the grain trade. The disease hitherto having been practically unknown in this country, our medical men and biologists have paid but little attention to it, and our knowledge of the disease and its causes is somewhat imperfect; but its appearance with alarming frequency in the South has awakened the United States health authorities to the situation, and the results of their inquiries are not reassuring. In the first place, says a writer in the Philadelphia Ledger, who has compiled about all the available data usually reported from non-professional sources, which constitute the inexpert, or surface, indications in such cases.

In the first place it may be said that there are in the United States thousands of people suffering from pellagra, probably tens of thousands, possibly hundreds of thousands. They have suffered from the disease for probably fifty years, but their complaints have been otherwise diagnosed by the medical profession of America, where the strange disease was reported to be non-existent. The asylums and prisons, the poorhouses and charitable institutions claim the greatest number. Among the poor who live largely on corn meal there is a high percentage of affected individuals, but the disease is no respecter of persons, and the well-to-do are in no way immune from it.

It is currently believed that the disease comes from eating corn affected with mold, and all authorities incline to this belief. It is not, however, established as a proven fact. Granting it, there is much mystery about the manner in which corn causes the disease, for so far no scientist has succeeded in isolating the deadly poison that is supposed to lie in the mold of the corn and proving to the satisfaction of the profession that here is the cause of the disease. The attempt to do this is now engaging the attention of the scientists of three Government departments, to say nothing of the hundreds of private investigators throughout the country.

Within the last year pellagra has been found, at first, in a few isolated instances at different places in the South. Previous to that there had been but one or two suggestions of its existence. The isolated cases were investigated and occasioned study of the disease. When it became better known and the local doctors began looking around, numbers of ill people were found suffering from what proved to be the same complaint. Such was the case at Meridian, Miss., where twenty cases developed in that small community. Such has been the case in South Carolina, where interest is most active, and where 500 cases are reported as existing.

The symptoms of the disease became well known, and the number of physicians who could identify it became large. It was searched for over a wide territory and found in abundance. The Public Health and Marine Hospital Service became interested, sent out circular letters describing its symptoms, and asked a report on cases discovered. The first returns showed: Florida, 12; Alabama, 154; Mississippi, 23; Louisiana, 3; Tennessee, 11; Kansas, 7; Georgia, 225; South Carolina, 500; North Carolina, 75; Virginia, 1; Maryland, 2; Pennsylvania, 1.

These returns were on first call and despite the lack of understanding of the disease and the natural delicacy the head of an institution would feel in declaring a disease he had failed to diagnose. Since receiving the first report the flow of reported cases has been constant and from an ever-widening field. The insane asylums are being found to be full of pellagra, heretofore regarded as merely insanity. In all institutions where cheap food is used, cases are likely to develop in great numbers, for eating meal or grits made of cheap and defective corn is regarded as the most probable cause of it. Hundreds of people are dying in such institutions annually because of this disease, and the discovery of the cause of it is likely to precipitate

such a series of institutional scandals as the country has not known for many years.

Until August 20 the disease was believed to be practically limited to the South, but Illinois is giving indication of having more of it than any of the states south of her, and is also reported as supplying a vast amount of the faulty food that is causing the spread of the disease. Kansas has plenty of it, and cases are showing up in Missouri. Farther north and west the health authorities have not yet gone, but these states are taken as an indication of what may be expected to develop. At the present rate of development thousands of new cases will be found within the next few months, and the medical profession and the public will stand aghast at the prevalence of the new disease.

Pellagra is not a contagious disease, and therefore need cause no great disturbance. The cases that exist today have probably existed for years, possibly for twenty or fifty years. Many of them may be cured, and the recurrence of them can absolutely be prevented by removing the cause of them. This latter possibility is the hub of the whole matter in importance, and is likely to call for vigorous governmental action in the immediate future.

The disease has existed in great abundance in Italy and Roumania for upward of a hundred years. It appeared there soon after the discovery of America, and the consequent introduction of Indian corn into Europe. Italy is noted for the excellence of her medical practitioners, and these have investigated the disease for many years. They are nearly, but not quite, in accord in declaring the disease due to the eating of moldy corn. The problem is very important to Italy, for 100,000 people are suffering from the disease there. Roumania is affected almost equally, with 50,000 chronically disabled because of the disease.

The scientists of these countries state that when corn is harvested while the ear is yet moist, because of not having been given time to dry out in the field, it is particularly apt to mildew in the barn. The same thing is true of even matured corn in particularly moist climates. When corn that is damp from any cause is placed in tight barns or cars for shipping it is likely to mold. This mold is frightfully dangerous, regardless of what is the cause of its development. It is a purely vegetable poison, and its action is in no way due to the presence of a germ which is animal. The presence of the mold may be readily determined by any individual, for it is none other than the mustiness that we have all smelled in corn upon occasion. That musty odor is the warming of the presence of a danger that cannot be overestimated.

In Italy the conditions which develop pellagra are full of the tragic. The peasants, who are practically the only class affected, know full well of the dangers of the moldy corn. They do not eat it unless driven to it, but often it is a case of eat it or starve. In the damp South European countries corn is much more likely to mold than in America. A peasant family from necessity eats this fully expecting that spring will take toll of a member of the family. The fact of the existence of 100,000 cases is proof of the pressure of this necessity.

The United States is probably the greatest corn eating community of them all, and the South more particularly makes of corn products the staff of life. Yet in this section under the normal conditions there is little danger of pellagra. Corn is plentiful, and naturally cures to advantage. The choice of the crop is selected for milling, and is devoid of mold. The poor man who takes his bag of corn to the mill, pays toll out of it, and brings home his meal, is never likely to suffer from the disease. But of late a new influence has entered the South. Great manufacturing firms further north have been producing very cheap food products made of corn. Their very cheapness indicates the possibility of their being made of defective corn. The poor people of the South have come to buy this material instead of getting their corn meal as of old. Scientists of the Department of Agriculture are inclined to believe that the chief danger rests with this cheap manufactured product.

The complaint is not uncommonly diagnosed as eczema, scurvy or leprosy. Among its first indications is a breaking out on the hands like a rash, which later becomes more serious, resembling a skin badly blistered from sunburn. This appears on the cheeks and backs of the hands. Later these peel off and give every appearance of having been scalded. One of the most constantly recurring scandals in insane asylums is the charge that attendants have scalded patients. The patients have been regularly shown as proof of this and the proof has been regarded as convincing. Attendants have been discharged in scores of institutions throughout the country on these charges. In the light of the present developments it seems that these patients were suffering from pellagra and that the attendants were unjustly discharged.

A sore mouth is also among the first indications of the presence of the disease. There is great difficulty in swallowing and even in talking. The patient becomes greatly emaciated, without energy, fretful, his face takes on a vacant stare, and final

ly insanity follows. Death may come in a few weeks, or the disease may not be severe, may recur each spring for a number of years, while the patient goes about his ordinary duties. If the disease is taken in its earlier stages recovery is possible, but when it is greatly advanced the case is regarded as hopeless. The Public Health and Marine Hospital Service is preparing instructions for the treatment of the disease, and these will be published very shortly. A complete change of diet and removal of all unsanitary surroundings will be the chief recommendations.

The Public Health and Marine Hospital Service has established a laboratory at Columbia, S. C., and has detailed Dr. C. H. Lavinder to the special study of the disease. There are numerous patients in the State asylum near by who offer the best opportunities for study.

In the meantime the medical corps of the army has become active, particularly in connection with the Illinois cases. Dr. Egan, state health officer, is a former army man, as is Dr. Zeller, who has charge of the Peoria Asylum. These men are operating in conjunction with the public health officials from Washington, and particularly with the army corps. Capt. J. F. Siler, Professor of Tropical Disease and Medicine, Post Graduate School and Hospital, New York, has been detailed to the pellagra work, as has Capt. H. J. Nichols, bacteriologist of the medical corps, which has just returned from a study of tropical diseases in the Philippines. These men are now in Peoria, where they have identified definitely seventy-five cases of pellagra, and have under observation almost as many more suspects. No conclusions have as yet been reached as to the particular cause of the disease in this particular case.

Prominent among the private investigators of the disease may be mentioned Dr. William Snyder Thayer of Johns Hopkins Hospital, Baltimore. He has recently had under observation a number of cases that have developed in Maryland, and his findings are most interesting. Speaking generally of the disease, he says:

"It is needless to suggest that the appearance of pellagra is of very grave significance. The prevailing idea is that the disease is due to the consumption of spoiled or moldy corn. The disease is really widespread in this country. It is apparently increasing. The products of corn are a most important element in the diet of all classes of society in this country. Is there not then, perhaps, a reason to fear a serious disease in the prevalence of this malady? One interesting point is already evident. In Italy, where corn is eaten only by the lower classes, the disease is absolutely limited to the poor. In this country I have heard within the year of several acute fatal cases of the disease in individuals living under the best social and hygienic conditions. It is most important that every one of us should be on the lookout for fresh cases of pellagra, and further investigation into its prevalence and cause should immediately be undertaken."

Dr. Thayer, in describing a recent patient, said that he appeared in the dispensary and complained that he could not swallow, that it hurt to talk, and that his throat and hands were sore. He was a driver, seldom ate corn, but fed it to his horses, and mixed it with his hands. His hands later appeared chapped, finally breaking out in blisters. Three days later his mouth and hands were sore and he swallowed with difficulty. He was greatly nauseated. The skin peeled off the backs of his hands and wrists, and the flesh beneath looked red, as though he had been scalded. The patient became irritable, was easily excited, and talked wildly. He told of a friend who had committed suicide with a cap pistol. After leaving the hospital he became violently insane or delirious, at times rational and at other times not. He is still alive, but greatly emaciated and weakening. His case is regarded as typical, but unusually rapid in its development.

The first pellagrous person known to enter the hospital at Meridian, Miss., was a Mr. Freeman of Macon, Ga., in October, 1907. His proved to be a symptomatic case of pellagra, but the case was not recognized as such, being diagnosed as eczema. When the eruption on the patient's face and hands dried up it left that sunburned appearance which has given pellagra in Spain the name of the sun disease. As cold weather came on Freeman improved—another marked characteristic of pellagra, which gets better in cold weather. He went home. The following fall, in September, he came to Meridian again. The disease had returned in a more violent form and attacked his brain. He suffered from insomnia; his hands became disordered, his general condition rapidly grew worse, and he finally died in much agony.

There was much in Freeman's story that shed light on the subject, and may cause some modification in the opinions as to the origin of pellagra. Freeman was 56 years old and ran a grist mill until five years before his death. He had lived almost exclusively upon corn, instead of wheat bread. It was his practice to eat uncooked cornmeal almost daily at the mill, and he carried around a



pocketfull of corn, which he nibbled from time to time, as he thought it helped the heartburn from which he suffered. Freeman died about a year after the eruption appeared upon him.

Not since the days when grippe became a national ailment has anything come before medical circles that has caused the interest that is being evinced in pellagra. The probability of its existing in any community in the land, the likelihood of its being found in any asylum, the strong chance that the mismanagement of the home institutions leading to the development of the disease, the chance that friends or acquaintances of every individual have suffered and died of it without the knowledge of the facts in the case, all tend to create an interest that is sweeping like wildfire over the country, and is leading to a turning upside down of many quiet communities and institutions that are forgotten of the world, as institutions are prone to be.

### AN OHIO ELEVATOR.

Highland County, eastward from Cincinnati, but within "hailing distance" of that great market, is naturally a country of "diversified farming," and the elevator business is affected by the environment: it is grain and seeds coming in from the farms and feed, flour and building materials going back to them, loaded at the elevators, of course. Such a business, at least, is that conducted at Leesburg, in



R. P. BARRETT'S GRAIN ELEVATOR AT LEESBURG, OHIO.

the northeastern corner of the county, by R. P. Barrett, successor to Barrett & Henderson, whose name still remains on the elevator shown in the picture, Mr. Henderson having retired some time ago.

The elevator is 30x40 ft. on the ground and has twelve bins (cribbed with 2x6 pine) each 35 ft. deep, giving 25,000 bushels' capacity. The office building, driveway and cribs are 25x50 ft. in size, and the boiler room 20x30 ft.

The equipment is excellent, there being two stands of elevators, corn sheller and cleaner, one 500-bushel hopper scale and one 6-ton wagon scale. There is also a feed mill for custom work. The power is supplied by a 30-h. p. steam engine,—all making a very handy plant.

New Orleans's exports of grain for the year ended August 31, 1909, included 2,911,704:10 bushels of wheat and 4,162,950:40 bushels of corn. The amount of corn was greater than the export of 1907-8, but that of wheat was less.

Inasmuch as 90 per cent of the stockholders of the late Minnesota Grain Indemnity Company have expressed a willingness to take the same amount of stock in the new Co-operative Grain Company recently organized at Minneapolis, it is the opinion of certain stockholders that any criminal procedure against Sherman R. Norris, doing business as the Minnesota Grain Indemnity Company, may be dropped.

[From the "American Miller."]

### CONCERNING CAR SHORTAGE IN THE FALL OF 1909.

A railroad company is a business concern, and most of the railroads of the country are conducted on a commercial basis. A responsible manager seeks to conduct the affairs of his company in such a manner as will insure at the close of the fiscal year a favorable result for the stockholders of the road. A detailed account of his duties and difficulties would require more space than can be appropriated, and, furthermore, it is not our intention to undertake the task of furnishing even a summary of them. Our purpose is to call attention to a probable shortage of cars and of engines that will be required by November, if not earlier, for handling the tonnage that will be offered throughout the country.

In one important respect, the railroads are in better shape than in 1907, the last date at which the volume of business was not abnormally contracted, and this is owing to the fact that in the past two years, in the case of many systems, a quite considerable extension of terminal trackage has been effected. This obviously will enable the railroads to switch cars more promptly to delivery tracks and to make up trains for forwarding

It is well to remember that it snows in winter, and that winter begins in November in some sections. Snow and ice greatly retard the movement of freight. Already, too, in some lines, notably many of the products of iron and steel, the foundries and mills are sold ahead.

Railroads are sometimes forced to give the preference, in furnishing cars and switch engines, to certain producers. Suppose, for instance, an important section of the country is suffering from a coal famine; in that case considerations of a humane character constitute a prior claim. Live stock, also, must be handled on schedule time, while cotton, being inflammable, must be run to destination with dispatch.

Every wholesaler and manufacturer knows that the proper handling of his line of goods requires that a certain style of car must be furnished by the railroad, and this fact must be taken into account.

As there is competition among railroads as well as among wholesalers and manufacturers, each seeking to get all the business, and particularly business for competing points, that each can handle, this naturally produces a scramble for cars and tends to insure that all cars fit to be used will ultimately go into commission. Shippers, however, in addition to all the demand for cars mentioned above, should remember that the railroads require a good many cars for the transportation of commodities required by themselves.

Distributors of staple merchandise who have the goods on hand and thus are enabled to fill orders promptly, manifestly have an important advantage, over a competitor who not only does not have the same in stock, but cannot positively assure his would-be customer when he will receive a supply. And right here is the moral of this dissertation.

### NEW CORN AT DECATUR.

The first ear of new white corn brought into Decatur, Ill., this season was a high-scoring ear at Carey T. Harney's grain office on August 28. It was nearly dry enough for shipping and was almost an ideal ear. Two ears of yellow corn were there the day before. All attracted much attention from the city grain men and county farmers, because they were so well developed, so well ripened, and so promising for an early and good crop. The ear of white corn was sent by H. I. Baldwin to a big corn mill that buys lots of Decatur corn.

It was grown near Mt. Zion and was brought in by W. S. Smith, says the Review. He says that there are thousands of bushels like it in that neighborhood and that the whole crop would be out of the way of frost in a few days.

The crop seldom ripens as early as it is ripening this year. Last year new corn was being delivered about Mt. Zion on October 15, and that was considered early. That date will be beaten this year by at least two weeks.

Not many contracts are being made by farmers for the sale of the new corn crop. This is because the buyers are holding off a little on the price. The farmers were asking 50 cents. The Decatur dealers were then offering 45 cents.

The first new corn marketed in Kansas, so far as we know, went into Coffeyville on August 25 and was sold to Ferguson Bros. at 60c.

The method of reporting estimates at Chicago has been changed so that the carlot arrivals previously estimated will represent actual inspection of grain from the afternoon previous, including that which is available for delivery on the market on the day that the report is made.—Pope & Eckhardt Company.

The threatened export grain handlers' strike at Portland, Ore., has been called off; but in view of the union demands of an increase of pay equal to 50c per day, the three leading firms of exporters, Balfour, Guthrie & Co., Kerr, Gifford & Co. and the Portland Flour Mills Co., announce that hereafter they will do their export business at Puget Sound ports, where the "open shop" prevails and where the rate is 30c. per hour.

through-billed freight. Greater dispatch in handling freight is equivalent to an increase in the number of both cars and engines.

It is doubtful, however, if there are as many "good-order" cars available today as was the case two years ago. Many new cars have been built and many needing repairs have been patched up, but probably the number dispensed with as not fit for further use exceeds the new ones in number.

All business men read the papers and therefore are aware that the various great staples which are raised by farmers promise to do very well. They should also take into account the products of the mines and the forests, together with the products of the sea. They ought also to bear in mind that the purchasing power of the prosperous farmer is great, and returning prosperity gives mechanics and laborers employment; consequently the movement of manufacturers and of supplies will be very large. Imports will increase and exports will be heavy; for Europe is also in a more prosperous condition than for two years past.

The object of this article is to urge those whose business requires handling large quantities of material of any kind whatsoever to look over the general situation, and if they find these statements are approximately correct, to ask themselves whether or no it would be well to anticipate their wants to a considerable extent. The probability of an advancing market in some lines is still another factor in the matter, but of this we are not at present speaking.



[From "Daily Consular and Trade Reports."]

### GERMAN GRAIN TRADE.

Consul-General Robert P. Skinner, of Hamburg, sends to the Dept. of Commerce and Labor a full report on the movement of grain and flour at that free port, from which the following extracts are taken:

Hamburg is the principal importing center in Germany for grain for both domestic consumption and for transshipment to Denmark, Sweden, and Norway. Cereals are also forwarded in river barges to Bohemia and at times are re-exported via Baltic ports to Russia. Domestic cereals are exported to the Scandinavian countries, Switzerland, and Great Britain, chiefly wheat and oats, by favor of an export bounty system which alone seems to make an export trade in domestic products possible. Certificates of export are issued by the government and may be used as cash for the payment of duty on cereals, legumes, rape, and colza seed, and on coffee and petroleum. They are also negotiable on the Hamburg Exchange. This ingenious system enables domestic dealers to get rid of native cereals of certain grades and to replace them with others especially needed, as, for example, American hard-winter wheat, No. 2, which millers require on account of its high percentage of gluten.

#### HOW AMERICAN GRAIN IS SOLD.

As every grain dealer knows, all American wheat and most staple products are sold abroad, not by sample, but on the basis of inspection certificates issued by some reputable commercial body. In Minnesota they are issued under the authority of the State. The seller of American grain guarantees nothing; he cables an offer of a certain number of bushels as per New York or other inspection certificate, which states that the grain is of a certain grade. The offer being accepted, he takes his certificates and bill of lading to the bank, where the buyer's credit has been established, and on delivery thereof to the banker, together with other documents, obtains his cash. Hamburg dealers regard with favor certificates of inspection issued at New York and Duluth. Complaint is often made that at other places the inspection is less scrupulously made than it should be, and doubtless this will be the case, however carefully local exchanges look after this matter, until the whole business of inspection is taken over by the national Government, as proposed, or until the commercial exchanges agree among themselves upon a system which shall be absolutely uniform, with inspectors who shall be moved from post to post at regular intervals.

#### METHODS OF TRANSPORTATION AND STORAGE.

Grain usually arrives in Hamburg in bulk, both in partial and whole shiploads, in sailing vessels and in steamers. The following kinds of grain arrive here in bags: Wheat and corn from Argentina (bags usually weighing 60 kilos, or 132 pounds); wheat from Oregon, San Francisco, Australia, and Indiana, and all kinds of grain imported in sailing ships.

Upon arrival in Hamburg grain is generally transferred from the ship direct into river barges, of which there are always hundreds available in the port. These are mostly used for the storing of grain, as there are few regular grain houses in Hamburg with facilities for mixing and ventilating. Still, the storage facilities here are considered satisfactory, and of late a large modern grain elevator and storage house has been put in operation by the Hamburger Getreide-Lagerhaus-Gesellschaft, on the quay of one of the most modern harbors in the port of Hamburg, in which all the best American devices have been adopted. Another very good storage house for grain is owned and operated by the Waaren-Credit-Anstalt in Altona. In these warehouses grain may be stored for an indefinite period and handled in such a way (stirred, etc.) that deterioration is scarcely possible.

The warehousing charges amount to about 3 marks (71.4c) per ton per month, while storage in barges, including insurance and trifling charges,

costs, according to the freight market, from 1 mark to 2 marks (23.8c to 47.6c) per ton per month.

#### DISCHARGE BY FLOATING ELEVATORS—WEIGHING.

The discharging of grain from ships into lighters, barges, or other vessels is generally done by pneumatic floating grain elevators, of which the Hamburg-American Line (for use with their own ships) and the Getreideheber-Gesellschaft have a sufficient number at their disposal to cover the demand. The cost for the use of these elevators, about 80 pfennigs (19 cents) per ton, is naturally borne by the ship. The fee for weighing the grain so discharged, which is done here by sworn weighers, is approximately 35 pfennigs (8.33 cents) per ton, and is usually done in the presence of a so-called "grain controller," of whom there are several in Hamburg. This controller is employed by the foreign shipper of grain to exercise a control over the weighing as done by the local (sworn) weighers engaged by the consignee of the goods. Thus the weigher represents the interests of the consignee while the controller sees to it that the shipper's interests are properly protected as regards the delivered weight, the taking of samples for arbitration, etc.

#### GRAIN STANDARDS AND CONTRACTS.

Wheat from Russia, Roumania, other European countries, South America, etc., is handled according to natural weight and samples, the seller guaranteeing a certain weight of the grain; for instance, 755 grams per liter, or 77 to 81 kilos per hectoliter. All kinds of grain are sold in Hamburg in marks per 1,000 kilos (1 mark=23.8 cents, 1,000 kilos=2,204.6 pounds), and are by local importers quoted to inland consumers, either delivered free into river barge or other vessel in the port of Hamburg, or are quoted c. i. f. Elbe or other stations in the interior, and are handled in accordance with certain terms fixed by the Verein der Getreidehändler der Hamburger Börse, the Hamburg Grain Dealers' Association. On imported goods the German import duty is always payable by the importer, not by the seller.

Transactions in grain from America, both North and South, as well as grain from Africa, Asia, and Australia, are handled here on the basis of the various and well-known forms of contract adopted by the London Corn Trade Association. Wheat, barley, and other grains imported from ports of the Black Sea, the Sea of Azoff, and the Danube are handled uniformly on the basis of the German-Netherlands agreement, made a few years ago by the German and Netherlands grain importers and dealers, which corresponds nearly with the terms and conditions of the London contracts.

Although occasionally shipments of grain arrive in Hamburg on consignment, particularly from remote shipping districts, such as the Argentine Republic and other extra-European countries (except the United States east coast), almost all the grain handled here is sold—cash against documents—before it reaches this port, and sometimes while the cargo is afloat. If such consignments are made from the United States, it is generally done because in the particular instance the American owner and shipper of the lot was able to secure favorable freight terms. Of course, the article is subject to considerable speculative manipulation, and business success depends much on clever and lucky exchange operations.

#### CONDITION IN WHICH GRAIN ARRIVES.

American grain is very popular, as it is all handled by modern machinery, from the time it is cut until placed on board the ship. It is practically free from all dirt, and very seldom the dirt found in American grain amounts to more than 1 per cent. The garlic found in some American wheat, particularly of Philadelphia and Baltimore inspection, is complained of as a nuisance to the millers. This foreign substance is said to do great harm to the milling machinery when wheat in which it is found in fairly large quantities is ground to flour. It also affects the quality of the latter.

Argentine grain, which is now also manipulated with modern implements, arrives in an equally clean condition, whereas wheat and other cereals from Roumania and Russia, grown in districts

where the farmers still apply most primitive farming methods, and where the grain is thrashed directly on the field, is mostly found to be full of impure and foreign substances. The German-Netherlands agreement allows for these grains as a basis 3 per cent dirt and 3 per cent of other grain. In grain from Caucasian districts the foreign substances often amount to 10 or 12 per cent.

#### THE DEPOSIT OF STANDARD SAMPLES.

Although there is not exactly a demand or apparent need in the trade of the deposit of official standard samples of grain at the beginning of every crop year, in the various ports in Europe via which American grain is imported, either in the consulates or elsewhere, it would undoubtedly meet with great satisfaction on the part of local business men if a sample system could be devised by which the local purchasers might be kept regularly informed of the result and qualities of the crops in the various exporting districts. Such a method would surely have a stimulating effect in years of plenty and of good crops, and in other years remove the belief sometimes current that our shippers of grain are trying to dump poor crops upon the German consumer by incorrectly classifying the various grades.

The following table includes the total production of the leading cereals in Germany in 1907, the total consumption in 1906-7 in the Empire, and the total imports and exports for 1908, given in metric tons of 2,204.6 pounds each:

| Chief cereals. | Production, 1907.<br>Tons. | Consumption, 1906-7.<br>Tons. | Imports, 1908.<br>Tons. | Exports, 1908.<br>Tons. |
|----------------|----------------------------|-------------------------------|-------------------------|-------------------------|
| Barley .....   | 3,497,745                  | 5,086,990                     | 1,985,629               | 1,879                   |
| Corn .....     | .....                      | .....                         | 669,887                 | 139                     |
| Oats .....     | 9,149,138                  | 7,786,414                     | 299,804                 | 495,435                 |
| Rye .....      | 9,757,859                  | 8,844,040                     | 847,264                 | 594,528                 |
| Wheat .....    | 3,469,324                  | 5,815,236                     | 2,090,544               | 261,278                 |

\*Summer barley.

†Wheat and spelt.

The principal countries from which grain is imported into Germany via Hamburg are the United States, Argentina, Russia, and Roumania, and the principal products are wheat, barley (as foodstuff), corn, rye, and oats.

### GRAIN ELEVATORS FOR INDIA.

The following supplemental report on the proposition to erect grain elevators in India is made by Consul-General William H. Michael, at Calcutta:

"The following telegram from Karachi was sent by the special correspondent of a leading morning paper in Calcutta, under date of April 14:

"The grain elevator committee will probably conclude its sittings at Karachi by Thursday. The proposal is to erect American elevators of large capacity at Sukkur and Samasatta and others at Multan, Sargodha, Todateksingh, Gofra, Lyallpur, Chiniot Road, Sangla Hill, Kasur, Ferozepur, Bhanda, and Ambala, to feed a shipping elevator at Karachi, the entire wheat traffic being thus expeditiously handled in bulk, not in sacks, throughout rail and ship transit. The early adoption of the elevator system is apparently inevitable on all grounds."

"It will be noted that the proposal is 'to erect eleven large American elevators' at certain points on the railways leading into Karachi from the vast wheat area tributary to that port, and one large elevator at Karachi to receive grain in bulk from the tributary elevators. The subject has been thoroughly discussed by persons interested, and it is now proposed to carry out the plan. I do not know just what part American builders of elevators and American manufacturers of elevator machinery are taking in this important movement, but American contractors should be interested. If the elevators are to be built on the American plan, they should be built by American contractors and American manufacturers should supply the machinery and equipment."

The Hard Spring Wheat League (farmers) in session at Grand Forks, N. D., "decided not to rely hereafter upon the crop reports or predictions of the crop experts of the country, but to get its own information on the subject." Fourteen were present at this meeting. The League has been trying to get up a trade mark,



[For the "American Elevator and Grain Trade."]  
**A FAMILIAR FIGURE AT ST. LOUIS.**

BY L. C. BREED.

Even the officers of the Merchants' Exchange of St. Louis are not more widely known than Michael Cooney, or "Mike," as he is familiarly called; and at his counter now, as in the days of yore, the denizens of the trading floor, from millionaires to office boys, may be seen partaking of their noon lunch in the basement of the building.

"Mike" has had a somewhat checkered experience. He was born in the Emerald Isle the last day of the last month of 1852. Coming to America in 1872, he finally brought up at St. Louis, toward the close of that year, and for eighteen months worked in Ecker's restaurant. Afterward he was for seven



"MIKE" COONEY.

years with Fred Lauer. Being discharged for staying at home to care for a sick wife and child, he was thrown on the world without a cent to provide for his family.

Thinking to raise a trifle, he took down town a clock, and in telling his acquaintance on 'change of his hard luck, they proposed that he should have a quantity of tickets printed and make a lottery of his clock. The following day, Mike, nothing daunted, put in an appearance at the lobby with his tickets. First vice-president, Chas. Slayback, came down with \$5; second vice-president, Jake E. Ewald, duplicated the five; R. P. Tansey and John Jackson followed suit; Geo. Bain wouldn't do no less; Capt. Slattery and Capt. Mason did likewise, while Michael McGinnis came down with a tenner to help out his fellow countrymen in trouble. Various other merchants showed their friendliness; and Mike's soul was made glad. He afterward secured the privilege of selling sandwiches in the building and began with a basketful bearing a sign with the following legend:

Mike's Sugar Cured Ham Sandwiches,  
 5c apiece. Taste and try, and if you  
 don't like, don't buy.

In less than an hour Mike had an empty basket only and lots of money in his pocket, for R. P. Tansey valued one at \$5. Gov. Stanard, John Jackson, Capt. Mason and Capt. Slattery allowed that figure to be the market price and paid the same. Geo. Bain got one at \$2, and some others at a cheaper rate. The second day Vice-President Ewald took him into the pit and told the boys to help themselves, after which Mr. Ewald passed the hat, which was found to contain \$11.70.

Ultimately Mike was able to rent a room in the building and began to make money. Then in 1893 his wife and child died and he lost his means. At a meeting of his creditors, Mike found he owed \$1,200; but on agreeing to pay in full if granted an extension, he was accorded the favor, and in due time, by small instalments, he discharged the debt.

On the occasion of the raising of a fund on

'change for the San Francisco sufferers, Mike's cheery voice was recognized calling out "Put me down for \$50," which raised a cheer. Day in and day out, Mike can be seen with his white apron, vociferously praising his sandwiches as the "finest in the land," and shouting "sold," as he passes one to a smiling customer.

### BASKET PUZZLES TRAFFIC MEN.

The traffic officials of the Northwestern Pacific are much perplexed over a basket that they have been requested to receive for shipment from Ukiah to Brooklyn, N. Y. It is said to be the largest basket in the world; and this must be true, for there is some doubt whether it will pass through the tunnels of the Sierra. The basket is of Indian manufacture and was designed as a store house for grain. It is shaped like a usual bushel measure, is mounted on poles to make it inaccessible to rodents, and has a huge basketwork cover. It is wider than the door of an ordinary box car, yet it could not be shipped on a flat car, as it would be liable to destruction from the sparks of a locomotive.

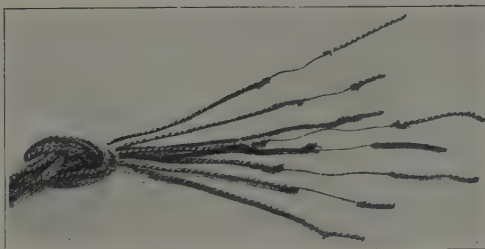
The basket was purchased from the Indians by Dr. J. W. Hudson of Ukiah and by him sold to the Brooklyn Institute of Arts and Sciences, to be installed in its museum. The doctor paid only \$25 for the basket, but it is likely to be worth a fortune before it reaches the Atlantic coast.

Taking it for granted that the basket can be moved at all by rail, the tariff officials are seaching the classification sheets to determine under what rate the shipment would move. Some claim the basket is merely a basket, while others contend that it should move under the classification that includes "parts of grain elevators." Traffic Manager Geary is of the opinion that the thing is a corn crib and should be so billed. In any event, it is too large to get into an ordinary box car and must therefore, take a minimum weight of 5,000 pounds, although it weighs only 200 pounds. Under this interpretation of the tariff it would cost \$175 to move the granary to Brooklyn.—San Francisco Chronicle.

### THE MENACE OF THE RAT.

The Bureau of Biological Survey, United States Department of Agriculture, has issued in the form of a bulletin a report by Prof. David E. Lantz on "The Brown Rat in the United States," in which attention is called to the enormous loss annually occasioned by rats and suggestions made for stopping their ravages.

Professor Lantz says that the rat is the worst mammalian pest known to man. Its depredations throughout the world result in losses amounting to hundreds of millions of dollars annually. But these losses, great as they are, are of less importance than the fact that rats carry from house to house, and



ELECTRIC WIRES UNCOVERED BY RATS.

from seaport to seaport, germs of the dreaded plague.

Man has constantly waged war against the rat for centuries, but the pest has increased enormously despite the fact that human ingenuity has been taxed to the utmost to suppress it. Though thousands are killed, the relief is only temporary, and other thousands soon replace the slain. This is due to the abundance of food and shelter furnished by man, resulting in conditions which permit the species to breed freely.

The brown rat is the most prolific of the rat family and it is calculated that a single pair of rats and

their progeny, breeding without interruption and suffering no losses, would in three years increase to more than 20,000,000.

This species is practically omnivorous, but its favorite food is grain and its products. Experiments show that the average quantity of grain consumed by a full-grown rat is fully two ounces per day. Fed on grain, a rat eats 45 to 50 pounds a year, worth about 60 cents if wheat, or \$1.80 if oatmeal. If the number of rats supported by the people throughout the United States were equal to the number of do-



WORK OF RATS IN CORNFIELD.

mestic animals on the farms, the minimum cost of feeding them on grain would be upward of \$100,000,000 a year. In addition to this, they destroy fully as much grain as they consume, and they pollute and render unfit for human consumption a much larger proportion of all other food materials that they attack.

Mills, elevators and warehouses in which grain, flour and feedstuffs are stored are subject to invasions of these animals and in addition to the quantity of foodstuffs eaten or destroyed the destruction of sacks, barrels and bins is a large item of loss. They also are a menace in manufacturing plants because of their habit of carrying matches into their nests and causing fires. Fires in mills and warehouses have been traced to the spontaneous ignition of oily and fatty rags or waste carried under floors by rats or mice. But the most common way in which rats cause fires is by gnawing away the insulating covering from wires used in electric lighting, where the wires pass under floors or inside of partitions. Even dams are not safe from the attacks of the brown rat, which, like the muskrat, burrows into them, often causing extensive breaks attended with serious loss.

The author of this bulletin says hawks and owls, especially the latter, destroy great numbers of rats, a good work which man should encourage. Weasels, minks and skunks are also rat destroyers. He recommends the persistent use of traps and poisons. But he thinks the most promising lines of effort lie in (1) rat-proof construction of buildings, especially the use of concrete in foundations; and (2) reducing the food supply of rats by the disposal of garbage, and the protection of food supplies.

Col. Tom Anderson of the Southern Pacific is promoting September 30 as "Rice Day," his desire being that every person in the United States, Mexico and Canada will eat at least one bait of rice on that day. As the result of his efforts almost every eating house system and every dining car on all of the railroads on this continent may serve rice in various styles on September 30 to their patrons.



## COMMUNICATED

[We invite correspondence from everyone in any way interested in the grain trade on all topics connected therewith. We wish to see a general exchange of opinion on all subjects which pertain to the interest of the trade at large, or any branch of it.]

### LOOKS LIKE FOUR CROPS.

*Editor American Elevator and Grain Trade:* The third cutting of alfalfa is pretty well in and was harvested under very favorable weather conditions, consequently is of good quality. Late weather conditions are favorable for growth of fourth crop. Prices on alfalfa meal are stronger and the demand very good. We are operating five mills to their fullest capacity. Five other mills are under construction.

Yours truly,  
THE CONSOLIDATED ALFALFA MILLING CO.,  
Newton, Kan. Per G.

### GROWING ALFALFA DEMAND.

*Editor American Elevator and Grain Trade:* Replying to your favor of September 2, would say that we find that the increased demand for alfalfa hay is greater than the increased acreage, this to a great extent being influenced by the number of alfalfa mills which have been constructed during the last year for the purpose of grinding alfalfa hay into meal, and by the increased knowledge of hay feeders of the value of alfalfa hay as roughage; and buyers of alfalfa hay have found out by the market prices that are ruling that the above is correct.

Most hay dealers expect a lower price for alfalfa hay than exists today. Without a doubt, choice alfalfa will command a good price during the entire season, and the same applies to alfalfa meal made from choice hay. With regard to lower grades, they vary considerably, according to hay receipts in this particular market; still the price remains remarkably high for this season of the year, this condition existing, as before stated, although there is a much larger acreage of alfalfa than during previous years.

Yours very truly,  
KORNFALFA FEED MILLING CO.,  
E. de Vigne, Sales Director.  
Kansas City, Mo.

[For the "American Elevator and Grain Trade."]

### ST. LOUIS GRAIN AND FLOUR NOTES.

BY L. C. BREED.

Notwithstanding the receipts of red winter wheat during August exceeded 5,200,000 bushels, attracted here by a price range above all other Western markets (being for No. 2 red \$1.11 to \$1.02), the shipments to the Southeast were very liberal. This is shown by the present stocks in the elevators of both soft and hard wheat being only 1,683,000 bushels.

John Dower, supervisor of weights, calls attention to the importance that more care should be given by shippers of grain and hay to keeping a record of seals, numbers, etc., placed on the cars at point of shipment; also that the seal be applied in such a manner as to prevent opening the door without breaking the seal.

Through the efforts of T. R. Ballard, a former president of the Merchants' Exchange, and others, a fund was subscribed for a silver punch bowl for the officers of the cruiser St. Louis. The punch bowl and twenty-four solid silver punch cups were recently exhibited in the directors' room, prior to the departure of Mr. Ballard for San Francisco, where the cruiser was stationed.

When John Dower was appointed supervisor of the weighing department of the Merchants' Exchange he thoroughly reorganized the system and introduced some important changes, both in the methods and in the personnel of the department. Recently he introduced the plan of furnishing the members with a supply of postal cards on which is printed a form to be filled out by the country shippers. It gives the destination of the car, kind of grain, the car initial, number, weight, seals and kind of scale weighed out on. The card requests that shippers should be particular to state whether the weight was obtained on wagon, hopper, track or automatic scale. This statement is used to make comparison with the railroad weight and the department's weights. If any material discrepancy is seen, investigation can be made before the identity of the grain is lost by elevating it. A printed form is also used in making out-turn weight re-

ports to consignee here. This is made in duplicate, the duplicate being filed in the office of the department.

The Exchange will be well represented at the meeting of the Boards of Trade at Chicago on September 17 and 18 by about one hundred members. A special train, to be known as the "Merchants' Exchange Special," will be provided for the trip. Wells's band will accompany the party. The arrangements for the affair are in the hands of a committee appointed by the Exchange, of which E. M. Flesh is chairman. His associates are C. F. Sparks, W. A. Gardner, Allen Baker and C. L. Nie-meier. Among the gentlemen who will make the trip are E. E. Scharff, president; M. W. Cochran, first vice-president; N. L. Moffitt, second vice-president, and Geo. H. Morgan, secretary.

[For the "American Elevator and Grain Trade."]

### GRAIN TRADE NEWS FROM OHIO.

BY H. L. SPOHN.

Local wheat stocks have increased to something more than a million bushels as the result of light shipments and the impossibility of any export trade. Farmers are selling more liberally than they did, but are not disposed to unload heavily yet. They have not been forced to sell, most of them having comfortable bank accounts as the result of prosperous condition for a long time. The quality of the incoming wheat shipments has been materially improved, confirming the earlier theory that farmers were selling the worst of their crop and storing away the higher quality. Much of the wheat that came into Toledo immediately after harvest was of such miserable quality that it was scarcely fit for anything but chicken feed. It is confidently expected that the quality will continue to grow better for the reason that the dampness is disappearing and for the greater reason that most of the undesirable stuff has already been marketed.

Oats have been moving very actively recently, the receipts of last week (August 28) amounting to more than 400,000 bushels, but a liberal Eastern demand with consequent heavy shipments has served to keep the local accumulation down and there was on hand on September 6 at Toledo in the neighborhood of half a million bushels. The quality has proven very satisfactory aside from a slight discoloration caused by excessive rains around harvest time. Kernels are well filled and there is very little complaint heard with reference to the grading of oats in this market.

A bumper corn crop is now assured for the state of Ohio. A few more days will put the bulk of the growing crop beyond the reach of injury from frost. Many fields are already matured and present a pleasing prospect. The acreage is unusually large and weather conditions have been ideal. Corn is a few days behind last year, and very little is cut as yet, but before the 15th of September the work of corn harvesting will be well under way. There is an unusually large amount of 90-day varieties, especially in northwestern Ohio, as a result of strenuous efforts on the part of grain interests at Toledo to bring farmers back to this class of corn. Samples of the new crop exhibited on the floor of the Toledo Produce Exchange have been of very high quality, ears being well filled and kernels fully matured. There has been some cleaning up of cribs through the state; and as a result of these scattered lots the receipts ran somewhat above 50,000 bushels last week, but a fair demand has completely depleted local stocks and there is now practically no corn on hand in Toledo.

#### VARIOUS STATE NEWS ITEMS.

A record yield of wheat is reported by Frank Boyer of Lindsay, Ohio, who has thrashed 454 bushels from a ten-acre field, for which he received \$485.78.

A delegation of a dozen or more Toledo grain men will attend the big meeting called for representatives of the various grain exchanges throughout the country to be held in Chicago on September 17-18.

Burglars recently broke into the office of F. W. Lipe, a hay dealer in East Toledo, decamping with less than \$1 worth of plunder. A big iron safe was shattered, three desks pried open, and the office generally turned upside-down.

United States Senator Charles F. Dick will be a guest of distinction at the Erie County Fair, where he will deliver an address on Thursday, September 16. He will arrive the day previous and a big reception is being arranged in his honor.

The Canadian government's cereal exhibit at the Toledo Fair attracts considerable attention. It occupies a space 60 feet long in the new grain building and consists of all kinds of farm products grown in Canada from Labrador to British Columbia.

Considerable local interest was manifested in samples of the Clarage 90-day corn, raised under the direction of Chief Grain Inspector E. H. Culver, of the Toledo Produce Exchange. It is thoroughly matured and appears to be about a week earlier

than the 90-day yellow Dent planted at the same time and grown under similar conditions. Aside from a rather large cob it was first-class in every respect.

John H. Clapsaddle, a farmer near West Mansfield, Ohio, is considerably bewildered over his unusual corn crop. Last spring he planted a new variety of Florida corn. The stalks have reached the height of more than eight feet without sign of tassel or ear.

W. L. McAnich, of S. McAnich & Sons, of Climax, Ohio, was a recent visitor on the floor of the Toledo Produce Exchange. He reports that corn was badly damaged recently in that section by a severe hail storm, and that clover is almost nothing compared with last year.

Relatives of Charles M. Zimmerman, a Burbank grain merchant who disappeared while carrying \$7,000 in cash some time ago, have been conducting a country-wide search. They believe that he has been robbed and murdered or is demented. There is fear that his wife, who is an invalid, may not survive the shock.

North Lewisburg, located on the dividing line of Logan and Champaign Counties, was recently visited by a big fire, when Grant McMorran's grain elevator, with all its contents, consisting of several thousand bushels of wheat, corn and oats, was burned to the ground. The loss was estimated at \$30,000, well covered by insurance. The origin of the fire is a mystery.

The new grain building at the Toledo fair grounds was struck by lightning and damaged to the extent of about \$500. A number of workmen who were engaged on the job and had taken shelter from the storm in adjacent buildings escaped injury. The bolt of lightning tore away portions of the solid concrete, sending pieces in all directions. The damage was at once repaired.

"Dry summers always bring better corn than wet seasons. The weather has been good for corn and we will have a splendid crop. It has been the experience of farmers in Putnam county that a dry season means good corn crop nine times out of ten." This is the opinion of C. Raabe, of Ft. Jennings, Ohio, who was a recent visitor on the floor of the Toledo Produce Exchange.

A banquet was tendered Saturday night, August 28, by the Ohio Millers' State Association to its retiring secretary, Charles B. Jenkins. The affair took place at "The Farm" in Toledo, and was a complete success. A number of prominent Ohio millers were in attendance. Mr. Jenkins has assumed the management of the Noblesville Milling Company, of Noblesville, Ind., formerly in charge of David Anderson, now president and general manager of the National Milling Company of Toledo.

An effort is being made to secure the release from the Ohio Penitentiary of George R. Gamble, arsonist, who was convicted some time ago of burning his grist mill at Bellefontaine, Ohio. Gamble is known as the "King of Fire Bugs," having to his credit a long line of burnings in several different states. He was captured in California and brought back to Bellefontaine, where he was convicted. A protest is being circulated and liberally signed opposing the release and it is thought doubtful if he will secure his liberty.

While shoveling grain into a chute on the fourth floor of the plant of the Northwestern Milling and Grain Company, at Toledo, William Stidham fell into the chute and, becoming wedged near the bottom of the narrow passage, was smothered to death under an avalanche of grain which poured down upon him. A fellow workman, William Hiller, who went down the chute to effect a rescue, barely escaped a similar fate and was nearly unconscious when rescued. The grain had become clogged and the men sought to loosen it by poking it with long iron rods. Suddenly it gave way and the unfortunate man was swept down with the rapidly rushing grain. As a result of the accident Coroner Henszler of Toledo has announced that he will order iron gratings placed over the openings of all such chutes in the near future.

One of the new features of the Lucas County Fair, held at Toledo during the week ending September 18, is a school of agriculture. A series of lectures by the best known authorities are given on the questions of scientific farming. To accommodate those who desire to attend a mammoth tent with a seating capacity of 5,000 is utilized. Among other subjects discussed are the following: "The Maintenance of Fertility," by C. E. Thorne; "Doughnuts and Dollars," A. B. Graham; "Improvement of Wheat in Ohio," G. C. Williams; "The Color Line," A. B. Graham; "Tillage and Cultivation," A. G. McCall; "What to Eat and Why," Mrs. C. W. Foulk; "Feeds and Feeding," H. W. Vaughan; "Corn," A. G. McCall; "More Corn," C. G. Williams. A handsome new concrete building is devoted to grain exhibits, and thousands of dollars were distributed as prizes to competitors from the three states of Ohio, Indiana and Michigan. The Canadian government engaged a large space for grain and seed exhibits, and the experiment farm of the state of Virginia is represented with an excellent display.



## ASSOCIATIONS

The Directory of Grain Dealers in the State of Iowa for 1909 by Sec'y Geo. A. Wells of the Western Grain Dealers' Association of Des Moines is now ready.

The Grain Commission Men's Association of the Minneapolis Chamber of Commerce has been organized. It will protect interests of grain dealers from unfavorable conditions.

Secretary Strong of the Illinois Association is preparing for publication the seventeenth annual edition of the "Directory of Grain Dealers of Illinois," which will be ready for distribution about November 1.

Secretary Courcier of the Grain Dealers' National Association reports that the Grain Dealers' Association of Atlanta, Ga., has adopted the "Grades of Grain" promulgated by the National Association, effective immediately.

The Oklahoma Grain Dealers' Association has under consideration methods for introducing hard Northern wheat seed into the state. Arrangements have been made whereby fifty cars of the famous Turkey hard seed wheat will be shipped into the state.

Pres. Reynolds and Sec'y Courcier of the National Association were in the East about September 1 and added 19 new names to the direct membership list in one week, besides obtaining pledges of a large attendance from Seaboard cities at the annual convention in October.

The Northwest Grain Dealers' Association met at Winnipeg on August 20. The old directorate was re-elected, namely, J. C. Gates, B. D. Young, R. T. Evans, W. W. McMillan, S. P. Clark, Alex Reid and W. H. McWilliams. F. O. Fowler, secretary-treasurer, was also re-elected.

The Grain Dealers' Credit Association of Cincinnati gave a banquet in the Zoo Club House on the night of Aug. 28. Members invited their employees and friends, and there were about two hundred persons present. The Credit Bureau work has been started under the direction of Henry A. Weis, who was made auditor, and members are now being supplied with all the credit information desired.

Sec'y John F. Courcier announces the following new direct members of the Grain Dealers' National Association: Urmston Grain Co., Tipton, Ind.; McCullough Grain Co., Kelly Bros. Grain Co., Kaufman-Boyle Grain Co., Tri-State Grain Co. and J. C. Robb, Wichita, Kan.; C. H. Canby & Co., Harris, Winthrop & Co. and Jackson Bros., Chicago; J. Colin Vincent and H. C. Jones & Co., Baltimore; Richardson Bros., Philadelphia; Darragh Warehouse Co., Little Rock, Ark.

The United Feed Dealers' Protective Association of Baltimore, an organization of grain, hay and feed merchants, many of whom are members of the Baltimore Chamber of Commerce, held its annual excursion on August 20. Between 50 and 60 members of the Association left on a chartered steamer from the foot of Commerce Street at 1 o'clock for Fairview, on Rock Creek, where in the afternoon a game of baseball was played between the Hard Feeds and the Soft Feeds. The committee in charge of the arrangements for the outing consisted of Harry M. Rever, chairman; R. H. Diggs and Samuel D. Ring.

Sec'y S. W. Strong announces the following new members of the Illinois Grain Dealers' Association: Callahan & Sons, Louisville, Ky.; Delp, Ettlinger & Co., 453 Bourse, Philadelphia; W. D. Blair, Malta; Holmes Hagama and Geo. Stansbury & Son, Holcomb; Dunn & Eversole, Essex; S. E. Rouch and R. L. Tabler, Mokena; F. H. Griggs, Stillman Valley; Great Western Grain Co. and Thomas & Adea, Sycamore; C. S. Hunt, Dekalb; C. A. Crosby, Monroe Center; W. Nashold, Monroe Center; Herscher & Gross, Buckingham; A. G. Smith, Union Hill; Coulson & Adams, LaHarpe; Fahnestock & Rush, Sciota, and H. E. Roberts, Blandinsville; T. F. Young & Son, Abingdon; Hunter Grain Co., Macomb; C. L. Grimsley, Swan Creek; Freburg & Tucker, Walnut Grove; Risser-Rollins Co., Kankakee; G. L. Bowman, Clare; J. A. Forest & Co., Dixon; Clark Grain & Elevator Co., Argenta; Coulson & Adams, LaHarpe, and A. W. Ford, Scottsburg.

### NEW MEMBERS IN KANSAS.

The following applications for membership in the Kansas Grain Dealers' Association have been received during August:

Wm. Walker, Jr., Goodland; P. S. Houston, Gem; Vancura Bros., Lucas; J. P. Horney, Brewster; Robert C. Maynes, manager Farmers' Elevator, Colby; Parrott Milling Company, Colby; John C. Dopp, manager Farmers' Elevator, Glasco; J. E. Rodgers, manager Farmers' Elevator, Bennington; C. F. Crowfoot, Hoxie; Lantis Grain Company, Selden; Paul D. Miller, Russell; F. D. Sperry, Ellsworth; Emmett Cooper, Dorrance; J. W. Machin, Wamego; H. F. Burke, Scottsville; Tucker Bulman & Son, Michigan Valley; J. W. Keates, Parnell; C. N. Bunds, Chetopa, and W. H. Gould & Son, Willroads.

This makes 59 new applications since the first day of June. If there is any other state association that can make a better showing, Secretary Smiley would be pleased to hear from them.

### THE NATIONAL CONVENTION.

The thirteenth annual convention of the Grain Dealers' National Association will be held on October 6, 7 and 8 at Indianapolis. Headquarters will be established at the Claypool Hotel.

### ELECTING OFFICERS.

In a paper read at the National Hay Association convention recently, Joseph Timmons of Kenton, O., had the following to say on the usual method and manner of electing association officers:

"In view of some very complicated questions arising, involving and requiring the action of the convention, the president and board of directors of this Association should be selected by ballot hereafter by the convention. Certain questions have arisen which require that this should be done. This suggestion should cast no reflection on the committee selected on nominations; but inasmuch as the election of officers is about the last thing done before the adjournment of the convention and many of the members have departed for their homes, it gives the committee as a whole a better chance to select their own officers.

"I am a strong advocate of the national policy of the selection of United States senators by vote of the people and not by the legislature, and I believe the same arrangement should extend in the making up of our officers of this Association."

### ARBITRATION RULES CRITICIZED.

Joseph Timmons of Kenton, O., in a paper on "Inspection and Grades," read at the late convention of the National Hay Association, departed for a moment from his subject, directly considered, to criticize the arbitration rules of the Association. "This committee's present status," he said, "should be radically changed or abolished altogether. I have had some experience as a member of the committee and have carefully studied its defects. It is composed of a chairman and four members, selected with reference to location. In arbitrating differences between members of the Association the papers are usually sent to the chairman, who generally writes up the opinion for the committee; then it is sent to each member of the committee for his concurrence in same. This is wrong, as some of the members do not take the time to investigate the case properly; they simply sign the award and let it go at that. This is not treating the litigants fairly.

"In my opinion the arbitration committee should meet not to exceed three times a year with all members present and hear the cases in chambers, with both plaintiff and defendant present in person or by submitting written briefs. These cases could be heard more satisfactorily, but of course with some additional expense. The last meeting could be held prior to the assembling of the annual convention and at the same place."

### NEW TRADE RULES FOR HAY SHIPPERS.

The following are the Trade Rules adopted by the National Hay Association at the Cedar Point Convention on July 27-29, 1909:

Rule 1.—It shall be the duty of both buyer and seller to include in their original articles of trade, whether conducted by wire or mail the following specifications: Number of cars or tons, number of bales, size of bales, grade of hay or straw, the point of shipment or delivery or rate point, the time of shipment or delivery, the route and terms, except as follows:

The specifications of Rule 1 shall apply except in cases where the buyer and seller have been trading on agreed terms and conditions, in which event it shall be sufficient for the words "usual terms" to be used in telegrams, and the use of such words shall imply that such terms and conditions as govern previous trades of like character shall govern.

Rule 2.—It shall be the duty of both the buyer and seller on day of trade to mail each other a confirmation in writing (the buyer a confirmation of purchase and the seller a confirmation of sale,) setting forth the specifications as agreed upon in the original articles of trade. Upon receipt of said confirmation the parties shall carefully check all specifications named therein, and upon finding any differences shall immediately notify the other party to the contract by wire, except in the case of manifest errors and differences of a minor character, in which event notices by return mail will suffice.

Rule 3.—The use of the words "immediate," "quick" and "prompt" shall be implied to mean as follows: Immediate, three days, quick, five days, and prompt, ten days, Sundays and holidays excluded. When no time is mentioned it is understood that "prompt" shipment will govern the contract.

Rule 4.—The buyer shall be allowed three business days to furnish shipping instructions and should he fail to furnish same on demand, the seller should have the option of cancelling the sale, or ship the

hay or straw to the known postoffice address of the buyer, after giving twenty-four hours notice to the buyer of his intention.

Rule 5.—In the event of receivers or purchasers having to buy in either hay or straw for the sellers account same shall be done within five days after the expiration of the terms of the contract, they (the purchasers) first telegraphing the seller to this effect and giving him twenty-four hours for a wire reply.

Rule 6.—Should the seller fail to notify the buyer of his inability to complete the contract as provided in Rule 5, the contract shall remain in force until completed, extended, bought in, or cancelled.

Rule 7.—It shall be the duty of the seller to load cars minimum capacity and to pay any loss for the non-observance of the rules governing the minimum carloads of baled hay or straw.

Rule 8.—"Terms of sale" shall mean that the weights and grades of shipment shall be determined by the terminal or destination market rules, unless otherwise specified at the time of the sale.

Rule 9.—It shall be the duty of the seller to mail to the buyer an invoice, giving the initial, car number, number of bales and weights if possible together with the contract on which the shipment is to apply, amount of draft and how routed. Also to furnish separate bills of lading and to make separate drafts for each car, unless otherwise agreed upon.

Rule 10.—Bills of Lading attached to drafts must be "Original" and signed by the Railroad Agent in legal form, and any loss arising from irregular or incorrect Bills of Lading shall be paid by the seller.

Rule 11.—When hay or straw is sold destination terms, public or official weights and grades shall govern, and certificates of same must be furnished to the seller, unless otherwise agreed upon.

Rule 12.—When hay or straw is sold f. o. b. shipping station the weights properly certified to before a Notary Public will govern settlements, unless tag weights are accepted by the buyer, or unless otherwise agreed upon at the time of sale.

Rule 13.—Should any of the hay or straw in the cars when inspected at destination be found of a different grade than was specified in the contract, the buyer shall notify the seller promptly by wire, and shall exercise due diligence to dispose of said goods at once, and to the best possible advantage unless otherwise agreed upon or instructed by the seller.

Rule 14.—Where sales are made on destination terms any claims that may arise, including those for shortage, damage, demurrage or over-charges in freight, must be made within ten days after the freight bills have been paid, accompanied by duly sworn certificates to substantiate same, original paid freight bills or other necessary R. R. receipts.

### GRAIN DEALERS' NATIONAL ASSOCIATION.

Secretary John F. Courcier makes the following announcements of amendments to the By-Laws of that Association, approved by the Board of Directors on August 10, 1909:

"Section 7.—Any member who may be delinquent in his dues shall not vote or speak upon any question at any meeting of this Association, nor shall he be allowed to resign until after such dues have been paid. Members in arrears for one year shall, upon the recommendation of the Executive Committee, be stricken from the roll; provided, that upon the receipt of positive refusal from a member to pay his dues in accordance with the requirements of this article, the secretary shall, with the approval of the Executive Committee, strike the said member from the roll and notify the direct members and secretaries of affiliated associations of the action; provided, further, that this section shall not be construed in conflict with Section 8 of this article.

"Section 8.—Any member in good standing, with dues fully paid up, may resign from this Association at any time by filing his written resignation with the secretary-treasurer; provided, however, that no resignation can be accepted while unadjusted trade differences exist, or while arbitration is pending, or while an award of the Arbitration Committee remains unsettled. (See Section 9 of this Article.)

"Section 9.—To render Section 8 of this Article of full force and protection to members, the secretary shall, upon receipt of a member's resignation, immediately send a copy of the full text of the resignation to direct members and secretaries of affiliated associations. If, at the expiration of thirty days from the date of notice, no objection shall be filed, the secretary shall notify the resigning member that his resignation has been accepted, and report the result to direct members and secretaries of affiliated associations."

Montreal grain trade this season has been such that the Harbor Board will recommend to the government the construction of a storage elevator for the port to cost approximately \$1,800,000. The grain handled this year so far is twelve times in excess of the same period a couple of years ago.



## FIELD SEED SECTION

### MEADOW FESCUE.

Meadow fescue has been an important grass crop for twelve or fourteen years in northeastern Kansas, but otherwise the acreage devoted to it has varied extremely, due probably to the wide variations in the price of the seed, which has in some years in Kansas reached a market value of \$150,000. The demand for seed is limited, but the merits of the grass are such that when farmers come to understand them, the grass is pretty certain to be more widely grown for permanent pastures in the timothy region.

Meadow fescue (*Festuca elatior* L., *Festuca pratensis* Huds.) is often called "English bluegrass," a name that should be discarded to avoid confusion.

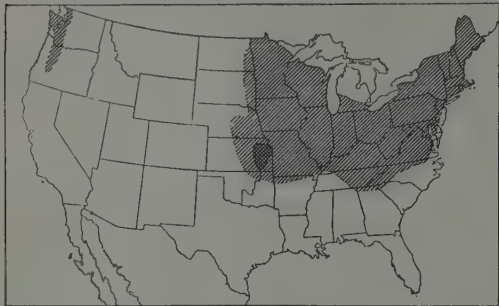


FIG. 1.—The Meadow Fescue Region of the United States. Shaded portion of Kansas is where most of the Meadow Fescue Seed is now produced.

It is strongly perennial, with long fibrous roots and stalk that ordinarily reaches 15 to 24 inches in height on upland soil and on rich, black bottom land three feet or more. The stalks are rather bare but there is usually an abundance of basal leaves with a shining surface and an intense green color. The panicle is not so open as that of brome-grass, and as a rule is slightly drooping, so that the presence of meadow fescue in a pasture can readily be detected by those familiar with the true grasses. Cases where meadow fescue seed has been used to adulterate brome-grass seed are not uncommon.

The seed of meadow fescue was originally brought to this country from England, and was used in pasture mixtures sold by seedsmen. This imported seed was nearly all of poor quality, and on that account the slow advance of the grass among farmers may be explained, who otherwise might have used it in mixtures of perennial grasses for pastures. Meadow fescue alone affords but scant pasturage during the summer months, but its ability to survive in wet places trampled by the stock recommends it for keeping such places productive where timothy, red clover and Kentucky bluegrass fail; it has besides the additional advantage of coming quickly and surely from seed and producing in a short time a firm sod and considerable pasturage. In England it is favored as an orchard grass adapted to clay soils; so that when the English idea of mixtures becomes more firmly established with the American farmer, meadow fescue will take a more prominent place as a meadow grass. Moreover meadow fescue seems to be slightly more drought-resistant than Kentucky bluegrass on account of its deeper root system. Its habitat, present and potential, is shown on the map herewith, although little is known now of its behavior in New England; and it may be added that the crop now is of most importance in eastern Kansas and southeastern Nebraska.

#### CULTURE OF MEADOW FESCUE.

There is little difficulty in getting a good stand of meadow fescue. It does best on a heavy black loam—the "jumbo" spots. It is not adapted to a light soil. The seed bed should be fairly well prepared, as for all grasses. The amount of seed varies, but the common practice is 10 to 15 pounds per acre, where a seed crop is desired; when a drill is used, half a bushel usually produces an excellent stand, a larger amount giving a larger yield the first year but producing a sod-bound field and smaller crops later on. Seeds sown broadcast may be covered with a harrow, but the best opinion favors a press or disc drill covering just a trifle more lightly gives better results. The time of seeding is from August 15 to September 15 or even somewhat later. However, the grass is very adaptable and even spring seedings in Nebraska for hog pastures have been very successful, meadow fescue, indeed, in some places in Kansas being preferred to alfalfa for hogs because it starts more vigorously.

#### THE SEED CROP.

Heretofore the production of seed has been the most important consideration in the growing of

meadow fescue, notwithstanding the uncertainty of the market, for the latter depends more on the foreign than on the domestic demand. When the foreign demand is weak the price falls and the grading is closer. When the price is below 5c a pound to the farmer the production of the seed is not considered profitable. The price in the past has ranged from 3c to 14c a pound.

The commercial seed production of meadow fescue was begun in 1877, near Gardner, Kan. It proved so profitable with the originator, S. H. Ayers, that his neighbors began to buy seed and engage in the production of meadow fescue seed in preference to wheat, as it was quite permanent when once seeded, furnished splendid pasture after being cut, and for many years a hay crop was secured from the stubble. The maximum production was probably reached in 1903, although 1896 was also a good crop year. In 1903 a conservative estimate places the amount of clean seed produced in Kansas as over 130 carloads of 30,000 pounds each. The 1906 crop was less than half this amount, and the 1907 crop showed a further decrease.

The price paid in 1903 for meadow fescue seed ranged between 3 and 5 cents, while in 1901 it was 14 and 15 cents. The high prices of 1901 caused the enormous acreage of the following years and the great oversupply of 1902 and 1903, many seed houses buying sufficient seed to fill their orders for a year or more ahead. Another cause for the decrease in acreage has been the rust, which has lately become destructive in the meadow fescue fields.

The grades of meadow fescue seed run opposite to those of wheat. After a car is examined the report is given in the percentage of chaff instead of that of pure seed,—as 5 or 20 per cent instead of 95 or 80 per cent, meaning that 5 or 20 per cent of the bulk is trash or foreign seed. Grading has come to be a source of much discord between the



FIG. 2.—PANICLE OF MEADOW FESCUE.

grower and the dealer, since in years of overproduction the grading, which is at all times in the hands of the dealer, becomes more rigid and close.

Meadow fescue is harvested for seed just as the field begins to take on the yellowish brown cast characteristic of a ripening grain field and the heads begin to droop on account of their weight. This in ordinary years is between July 1 and July 10. The grass is cut with an ordinary grain binder and placed in small shocks for curing. Careful growers put four bundles only in each shock and bind the tops together with twine to prevent injury from storms and loss of color through bleaching.

A large percentage of the growers thrash their

meadow fescue directly from the field, hauling it to the machine on hayracks with canvas stretched over the bottom, which saves the seed that shatters out. However, thrashing from the shock is warrantable only because it saves labor. An ordinary grain thrasher is used in thrashing with no changes except the shutting off of most of the wind from the fan and the addition of a special screen, although this latter is not indispensable, as fairly good work can be done with an ordinary wheat riddle. The brightest and heaviest seed is obtained by stacking the fescue and thrashing after it has had sufficient time (six to eight weeks) to cure in the stack.

The yield of seed varies greatly. From 6 to 25 bushels per acre have been reported; 15 bushels is considered a good yield, and the average probably lies between 8 and 12 bushels. First-class seed weighs about 25 pounds per bushel. Opinions differ as to the advisability of pasturing meadows which are to be used in seed production. A considerable number of farmers who have large stock interests claim that they are able to pasture for a short time in the spring and again throughout the fall without injuring the seed harvest. Observation would lead to the belief, however, that the largest yields are obtained from fields which are not pastured in the spring and very judiciously, if at all, in the fall. If the growth is heavy in the autumn a slight grazing will do no harm, but heavy pasturing in the spring will lessen the vitality of the plant and thus tend to produce a light yield of seed.

The principal shipping points in Kansas for meadow fescue seed have been in the past at Gardner, Wellsville, Olathe, and Springhill in Johnson county; Overbrook in Osage county; Reading in Lyon county; Madison and Hamilton in Greenwood county; Fredonia and Lafontaine in Wilson county; and Marysville in Marshall county. Some seed has been shipped from Lockwood and Nevada, Mo., but the whole state of Missouri has never furnished more than five carloads in any one year.

### MANCHURIAN BEANS.

"One of the most interesting things that I ran across over in Europe," said Geo. W. Patten to the Record-Herald "Speculative Gossiper," "was an entirely new trade that has sprung up in Manchurian black beans, of which over 15,000,000 bu. were exported to the United Kingdom last year. The new trade is a direct outcome of the Russo-Japanese War. The production was started to supply the armies, and there was a big supply left over when the troops were pulled out. The exports began from Vladivostok by way of the Suez Canal and paid such a big profit to everybody concerned that they have continued since. The refuse of these beans is found to be better feed than oil cake or corn and sells at about \$26 per ton, after considerable oil has been subtracted for soapmaking and other industrial uses. The refuse is pressed into cakes very similar to our oil cakes."

### IMPROVING THE OATS.

Among the recent introductions of seed oats from abroad the Swedish Select, Kherson and Sixty-day are most important, says Circular No. 30 of the Bureau of Plant Industry; but the Circular after discussing the work the Bureau is doing to increase the ratio of kernel to hull and the weight per bushel, says: "Yield is the essential basis of selection. Mechanical selection and the introduction of seed from foreign countries or from sections more favorable for the production of the oat crop are but temporary makeshifts. The use of the seed plant usually gives good results; but permanent improvement is best effected by pedigreed strains produced from individual plants. A large number of these selections should be made and tested, the poorer ones discarded, and the very best increased as rapidly as possible. Where one of the pedigreed strains proves of exceptional value it should be widely tested and eventually named and introduced as a new variety. At present the farmer is advised to leave hybridization of the small grains to the professional breeder."

### RAISING SEED FOR SALE.\*

Scattered here and there over the country are farms devoted to the raising of seeds for sale. These farms are of two classes, namely, those which raise vegetable seeds, usually on contract for some large dealer, and those which make a specialty of growing improved seeds of ordinary field crops. The latter class of farming, that is, the growing of improved seeds of corn, cotton, potatoes, wheat, oats, etc., offers at the present time one of the best opportunities to be found in farming in this country.

The ordinary farmer will not take the trouble to breed up the seed of his field crops, yet he will buy improved seeds, and is justified in so doing. The crops which are most easily improved by selection of excellent individuals for seeding are corn, cotton, and potatoes, and there is room for much develop-

\*Compiled from Farmers' Bulletin 361, U. S. Dept. of Agriculture, entitled "Meadow Fescue: Its Culture and Uses," by H. N. Vinal, Sci. Ass't, Forage Crop Investigations, Bureau of Plant Industry.

\*From a paper entitled "Types of Farming in the U. S." by W. J. Spillman, in "Yearbook of the Department of Agriculture," 1908, pp. 358-359.



ment in the growing of improved seeds of these crops practically wherever they are grown.

Improving the seed of wheat, oats, barley, and other crops in which the individual plant is small is a very difficult task, and requires technical training for its successful conduct. Such work must be left to the trained specialist. The breeding of improved strains of corn, cotton, and potatoes does not require large equipment, and there is much valuable literature to aid the beginner in this line of endeavor. The growing of seeds of garden vegetables is a specialty which requires a good deal of training and comparatively large amount of capital and labor. It is not an inviting field for the beginner, yet it is a profitable type of farming when properly conducted.

#### CLOVER SEED.

"Toledo is the natural outlet for the large clover-producing states and is near the large consumers," says King & Co. "Indiana, Ohio and Michigan are the three largest producers. They raise as much in average seasons as the other states combined. New York and Pennsylvania are always the largest importers, their soils require it. There are more active enterprising seed dealers at Toledo than in several other markets combined. There is always active competition. There are many good and large dealers elsewhere, but nearly all use Toledo at times. Inspection is fair to both buyer and seller: It is not perfect, but the inspection certificates are a legal tender everywhere. Conditions are different from any recent season. Short crop and big surplus of old are the chief factors. This is the first year in a long time that there has been a large surplus carried over home and abroad. There are liberal stocks in sight at the leading centers, and a larger amount in farmers' and interior dealers' hands."

"Clover seed (new) should soon be moving," said Zahm & Co., on August 21. "Probably will be about a month later than last year. Early in August year ago receipts of new seed were quite liberal. Each mail was loaded with samples from the country for bids or grade and value. None received this year as yet. Most dealers waiting to get a peep at the quality of the new seed and some idea as to size of crop before taking a decided stand either way. Bulls feel quite confident of their position, taking stock in the rumors from many sections which report small crop or none at all. They say the new plant (which will raise no seed this year) is doing fine, but that the damage done to the old plant is serious, which means a very short crop. Time will tell the extent of the loss. These same sections may turn up later with more seed than expected. Bears have some good arguments. They bank on the big surplus carried over from last crop and say present prices will bring it out. Foreign situation will cut a big figure. Little is known about their crop."

#### THE CLOVER CROP.

Indiana shipper writes Zahm & Co., Toledo, that, "It begins to look like our original idea of a short clover seed crop is about to be realized. The writer has all along felt like we would see \$9, and now we predict \$10 for March in Toledo, and won't be surprised to see it sell at \$12. Farmers will be clover seed crazy next spring, owing to the great success they have had sowing it the past spring. The price will not stop them under \$12 on the farm. The only bear feature is the old stocks carried over, which if in farmers' hands will never come on the market, and what the dealers hold will be held very strongly if we get advancing markets. If the frosts in Wisconsin and Michigan are as heavy as reported they will damage the clover seed."

Missouri September crop report says clover seed yield in the southeast section of the state is excellent, two to three bushels per acre.

R. Liefmann Söhne Nachf., Hamburg, in their general report on clover and grass seeds in Europe to end of August, among other things, say: "The yield of white clover is an extremely short one; only small sections produced good qualities, the rest turned out unsatisfactory. Old stocks were not inconsiderable, but owing to this year's poor result, are now in firm hands. We believe that the further the season advances the higher prices are bound to go. We expect to see higher values than have ruled the last fifteen years. Crimson clover is a poor crop. Qualities are fairly satisfactory. Present values seem justified, considering that old stocks were light and are totally cleared. Red clover stocks (old) throughout Europe were very large, though not quite so enormous as they appeared to be at the end of season. All through the summer demand was more or less active, on account of unfavorable weather conditions. At this moment the situation is as follows: In many districts there is still a scarcity of forage supply, and they may be obliged to cut the clover for hay, instead of saving it for seed. Again several other sections continue to complain of too much drought. From Russia, Austria and Bohemia, and these are important countries of production, promising reports are received, especially from Russia, where they expect a very considerable crop. Chili is said to have a light crop. The Alsike outlook is rather

moderate; qualities promise to be very nice, should the weather continue propitious. The article is dull, inasmuch as the brilliant outlook in Canada, and the good one in the United States, make buyers cautious. Of Kidney Vetch an average output is expected. The alfalfa crop has but been harvested in Turkestan, and is reported to be satisfactory; quality good. New seed is likely not to arrive here until January. The second cutting, from which the seed is usually taken in Europe, is said to have been mostly cut for hay. From the third cutting very considerable quantities of seed can never be expected. Considering the situation from an easy point of view, we can calculate only upon a moderate yield. Old supplies have largely melted away. Old stocks of timothy are still on hand. The outlook for this article is quite uncertain yet, as the yield depends likewise upon whether or not the plants will be saved for seed."

#### DODDERS.

The Nebraska Experiment Station (Bul. 110) reports from species of dodder found in alfalfa and clover by the Laboratory, to wit: field dodder (*Cuscuta arvensis*), clover dodder (*Cuscuta epithymum*), large-seeded alfalfa dodder (*Cuscuta indecora*) and small-seeded alfalfa dodder (*Cuscuta planiflora*). Still another dodder is shown in the



DODDER (*Cuscuta* sp.) ON ALFALFA (*Medicago sativa*). From Farmers' Bull. 194, U. S. Dept. Agr.

cut. Of course no seed should be planted in which any one of these dodders is present even in a small amount. The seeds of all large-seeded dodder can be removed from alfalfa by using a sieve of 20-mesh wire cloth of No. 34 (W. & W.) gauze wire. Shake the sample well for thirty seconds; one sifting ought to be sufficient, but two may be required.

#### RECENT EXPERIMENTS WITH NEW CLOVERS.

Chas. J. Brand of the Bureau of Plant Industry has been devoting attention of late to experiments with new clovers. In addition to a new hardy variety found by Prof. N. E. Hansen in Norway called the Toten clover, closely resembling the Russian Orel clover, about thirty strains of European red clover, including among others the Steiermark, Silesian, Moravian, Bohemian, Italian, Thuringian, Austrian, English, Russian and Polish, are being studied in co-operation with the Minnesota and Ohio Experiment Stations, and also with a private investigator in the humid coast region of northern California.

Experiments are also being made to determine the availability for cultivation of some of our wild native clovers. There are some 75 native clovers in the United States, some of which grow with remarkable vigor and attain large size. Many also seed very freely, an important quality in cultivated plants. The officials of the Bureau believe many of these wild species may prove valuable for particular types of soil, climate, and methods of cultivation.

Experiments have also been made with shaftal, a very promising annual clover which has been long cultivated in northwestern India, Afghanistan and Persia, but had never been introduced into the United States until seed was recently obtained through the courtesy of Mr. Philip Parker, of the Indian Irrigation Service. In the Asiatic regions mentioned, where shaftal is grown almost exclu-

sively under irrigation three, or even more, cuttings of hay are obtained each year. The plant is a rapid grower, cures readily, makes fine hay that is greedily eaten by cattle and horses. In the Himalayan plateau shaftal grows at an altitude of 8,000 feet; hence the officials of the Department of Agriculture believe that it will have considerable frost resistance, which may greatly increase its usefulness in this country. Experiments made last year in localities as widely separated as Carlton, Oregon, Danville, Virginia, Yuma, Arizona, Stockton, Calif., and St. Anthony Park, Minnesota, have been highly satisfactory.

#### FIELD SEED NOTES.

S. T. Harns has been appointed seed inspector for Davidson County (Nashville), Tenn.

Over one hundred prizes have been offered by Iowa newspapers for seed corn exhibits this fall.

S. B. Heiges of Powhatan Co., Va., is lecturing at farmers' institutes in that state on pure bred seed corn.

Lamar, Colo., reports a fine alfalfa seed crop. In Lassen County it is said that nearly every farmer will have from 40 to 50 acres of seed to sell.

Thos. D. Hubbard, seed dealer at Kimball, Kan., recently secured an order for a bushel of white seed corn to be sent to the Department of Agriculture of the Transvaal, S. A.

The 1908 price of seed bags will be continued at Toledo, to wit, 22c. for Starks and like quality, and 19c. for American and like quality; value of damaged bags to be fixed by the seed inspector.

A farmer at Leslie, S. D., who has been growing alfalfa for several years this season, contracted to sell 1000 bus. of seed at \$6. If he does this from his own land, the return will equal \$40 per acre.

The first car of new crop flaxseed received this year in Minneapolis came in on August 20 from southern Minnesota. It was of good quality. The flax crop of Minnesota and North and South Dakota is a big one this year and the movement is likely to be early.

Of all the counties of Kansas to which the state authorities eighteen years ago sent seed for the impecunious farmers, the cost "to be repaid to the state as soon as the counties feel able," only two are now delinquent, Haskell and Seward, owing \$166 and \$525 respectively.

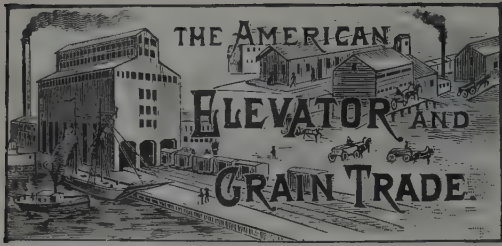
The entire wheat crop of W. B. George, dry farmer near Rimrock, Mont., was sold to be used for seed only. The wheat was the progeny of the prize-winning wheat at the display of the Dry Farming Congress of 1908, and is said to be especially good for seed purposes. The wheat is at Billings.

Alfalfa seed buyers in Arizona are paying from 11 to 11½c. per pound for seed at the thrasher. At this rate, a Buckeye correspondent says, "this, with a first crop of hay cut early in the spring and winter pasture and the threshed hay, will give at least \$85 or \$90 per acre,—not so bad for a year's work."

A. E. Chamberlain of Brookings, S. D., has devised a new plan for getting better seed grain to the farmers. He has recommended to the managers of certain line elevator companies in the Northwest that each country station set apart one bin to be used for seed grain only; the managers of the several houses at each station getting together to determine what variety of each grain grown in that vicinity is the most profitable. Having done this the several bins should be set apart, one grain to each house; and then the best grain offered for sale of the type decided upon would be binned for seed. As a further object lesson, it is proposed that whenever a farmer should come to the market with an inferior seed, or seed of a variety not best adapted to that locality, each buyer who looks at his load should call his attention to the inferiority of the grain and to the fact that he could get a much better quality of seed at the house handling that kind of grain for seed. By united effort of the buyers at the country markets in this way it is believed a great many farmers might be prevailed upon to get better seed.

Insurance agents at Fort William are airing their grievances, say the insurance papers. The elevator capacity in the twin towns is now nearly 30,000,000 bushels, a number of the buildings being fireproof and several of them sprinklered. Five new elevators are now being built in Fort William alone, while the Canadian Northern Elevator plant at Port Arthur is the largest in the world, with a total capacity of 7,250,000 bushels. On most of the grain stored, insurance is written at Winnipeg or through the Port Arthur offices of the "outside" brokers, whose Winnipeg activities have already been referred to. The local agents at Fort William and Port Arthur are asking their companies to sign an agreement not to write grain overhead. A number of companies have signed, and in the meantime the enactment of an Ontario resident agency law is being discussed so as to cut out Winnipeg agents.





PUBLISHED ON THE FIFTEENTH OF EACH MONTH BY

**MITCHELL BROS. COMPANY**

(INCORPORATED)

**OFFICE:****Manhattan Building, 315 Dearborn Street,  
CHICAGO, ILL.**HARLEY B. MITCHELL.....Editor  
A. J. MITCHELL.....Business ManagerSubscription Price, - - - \$1.00 per Year  
English and Foreign Subscription, - 1.75 " "**ADVERTISING.**

This paper has a large circulation among the elevator men and grain dealers of the country, and is the best medium in the United States for reaching persons connected with this trade. Advertising rates made known upon application.

**CORRESPONDENCE.**

We solicit correspondence upon all topics of interest connected with the handling of grain or cognate subjects.

**CHICAGO, SEPTEMBER 15, 1909**

Official Paper of the Illinois Grain Dealers' Association.

**MISQUOTATION OF RATES.**

The statement of Rate Expert McCune of Spokane, found on another page, gives new emphasis to the weakness of the Hepburn amendment to the commerce act, in so far as it relates to the quotation or determination of rates. As the law now stands it gives the railroad every opportunity for deception and is an incentive to deceive the ignorant by misquotation of rates by inflicting upon the carrier no punishment for the deception but throwing it all upon the shipper who relies on a false quotation, because the carrier may secure business by deliberately quoting a low rate, and then, when the freight is delivered, collect the real rate at the delivery end, even years after the transaction should be closed or whenever the blunder might be discovered.

Mr. McCune repeats what has been said in these columns before, that "there is no parallel in law equal to this immunity of the railroads," since the law protects the roads in their errors of both omission and commission and does it entirely at the expense of the shipper who is expected to know what is the correct rate, when, it might happen, as Mr. McCune has shown in at least one case did happen, that two different carriers, both acting in entire good faith, might not know it, and could be set right at last only by an appeal to the auditor of the Commerce Commission.

Surely the Trans-Mississippi Commercial Congress should receive the hearty support of all shippers in the effort to have this anomaly of the law corrected; no business man in these days can be expected to wait upon the convenience of the auditor of the Commerce Commission for a quotation of an important freight rate in order to do an honest business and yet avoid the onerous penalties the law lays on him who

inadvertently makes a mistake or relies on a blundering or wily freight agent or solicitor.

**CHICAGO BOARD OF TRADE ENTERTAINS.**

The Chicago Board of Trade on September 17 and 18 will entertain delegates from all the grain exchanges on the Continent as well as many individual members of the milling and grain trades from all parts of the U. S. and Canada. In many respects it will be the most representative body of men interested in grain and grain products ever assembled in this country. The meeting has been called a "good fellowship" meeting, like that at St. Louis. It will be that and it will be more; as will be seen from the outline program found on another page. It will be the first decisive step taken by the grain exchanges of the continent toward uniformity in aims and methods and to consolidate and unify trade opinion and trade influences for the protection, when need be, of the great commercial principles and practices represented by the grain exchanges of the Nation.

Why should every conceivable form of demagoguery be organized for the exploitation of rotten business economics and the sane, wholesome and indispensable commercial forces of the Nation as represented in the exchanges go along unorganized and unrecognized except as a "suspicious character"? The more difficult to understand is truth, the more needful the support of it by business men on all occasions.

This paper holds no brief from the exchanges or the Board and may not express the purpose of this meeting; but we believe that the grain exchanges *per se*, since even Congress does not seem to recognize their great usefulness to the commercial world in general and to grain producers in particular, may without loss of dignity consolidate their influences for their own defense and apology.

**SPREAD OF PELLAGRA.**

The startling increase in the past few weeks of the number of reported cases of pellagra, not only in the South but in the North, in insane asylums and public institutions, as well as in private homes, has directed peculiar attention to a disease that until recently was unknown in this country, although known to be endemic in parts of Italy and eastern Europe. It has been accepted theory that the disease, which in most cases among the poor is mortal, is caused by the eating of moldy corn, or the products thereof—the "blue-eye" corn mentioned by Mr. Bowie on p. 121, or that which is unsound but still in better condition; but this may be more theory than fact, a mere conclusion *post hoc*—the Italian poor eat moldy corn when forced by famine or poverty to do so; Italian poor suffer from pellagra; therefore pellagra is caused by eating moldy corn. Perhaps it is; but if it is, does it not seem strange that the disease should be only now isolated and identified in this country, where corn in every form has been used as food by the white race ever since they became residents of the hemisphere.

At any rate, the disease is now definitely identified and lodged in the United States and is the subject of scientific investigation which may soon declare the facts. In the meantime, Mr. Bowie and the Nashville millers, who recently

notified Indiana shippers of corn that they will not stand for "blue-eye" corn, no doubt are the forerunners of a public opinion that will sooner or later affect to some extent the inspection, at least, if not the movement, of corn. Our people are peculiarly subject to stampedes through pure freak. This pellagra may or may not be an exception; so that the grain trade should take every opportunity to discourage the marketing of unsound corn by their patrons as well as by themselves and to carefully separate all unsound ears at the sheller from the sound grain.

**MILLING-IN-TRANSIT RULING.**

The Commerce Commission has followed the decision quoted elsewhere on the interpretation of the milling-in-transit privilege, that the rate applying on the shipment is that of the initial movement, by a ruling in Tariff Bulletin 17A, effective September 1, to the effect that hereafter no substitution of tonnage will be allowed under this privilege. The ruling declares that the "privilege cannot be justified on any theory except that the identical commodity or its exact equivalent or its product is finally forwarded." It recognizes the fact that the identity of each car of grain cannot be preserved; but that fact does not make it lawful to substitute tonnage of a different commodity than that of the initial movement; that is to say, corn may not be substituted in transit for any other grain, nor lumber for salt, etc.

The ruling has been criticised in some quarters; but one fails to see how it will work a hardship on those who use the privilege as it was intended to be used, for the convenience of millers, cleaners, etc. Commissioner Lincoln of St. Louis seems to voice the conservative view by saying that the rule is "directed only against unlawful practices that may be employed by the grain dealer or miller at the transit point"; and does not, so far as now appears, in any way interrupt the processes contemplated by the privilege strictly construed; but it does put an end to surreptitious rates obtained by means of improper substitution of tonnage. It may, perhaps, prevent such a substitution as that of a soft wheat for a hard wheat, or *vice versa*; but that is a point yet to be passed upon,—aside from which the ruling seems a proper one.

**DODGING THE ROBBERS.**

It is one of the privileges of the sorehead and the agitator to cast suspicion on the incorporated and legally authorized grain exchanges; but these same libellants have yet to find the farmer who has lost his grain when shipping to an authorized exchange commission man. On the other hand, during the past fifteen days no less than two cases have been reported from two widely separated markets, that record the loss of grain shipped to receivers not members of the local exchanges, and who therefore, were, of course, "not robbers," as the agitator would put it.

For example, two cars of corn valued at \$1,278.52 were shipped from a Kansas town by owners who probably distrusted the regular "exchange robbers" but confided in a St. Joseph adventurer who after getting the grain "left St. Joe suddenly" and has not since been heard of. In another case a farmers' company, which had



heard of the "exchange robbers," shipped three cars of barley and one of wheat, valued at \$3,000, to a Minneapolis duplicate of the St. Joe adventurer, who also has turned up missing. Several other Minnesota farmers' concerns are in like state of unrest and concern about this Minneapolis beat.

One must regret the loss of their money by these honest people; but one regrets it less, perhaps, because men who do business on the advice of their prejudices, and in defiance of the precautions taken by good business men to investigate the character and reputation of agents, are really not much entitled to sympathy.

#### WILSON NOT SO BAD.

The Portland *Oregonian*,—on the strength of Secretary Wilson's ridiculous controversy with Mr. Patten as to the accuracy of his department's crop reports, and his more ridiculous dictum that the absolute value of wheat was but a dollar a bushel, made at a time when it was being purchased by millers at \$1.30 to \$1.50 to grind into flour,—says he has "shown himself utterly unfitted for the position he holds [and] the farmers, who are the principal sufferers by his ignorance, should unite in a demand for his resignation." But isn't the *Oregonian* getting unduly excited? Mr. Wilson has shown himself to be a very able Secretary, for the department never before reached the high state of efficiency it has achieved under his direction. It is true Mr. Wilson talks like a "bear"; he sees the "silver lining" and says so. Big crops are the thing with him always. But, Lord bless us, now that everybody understands him, everybody "coppers" his predictions, the farmers included, and his speeches are "just beautiful"—a good deal more so than if he went around lugubriously consigning all crops to the bowwows and tickling the bulls under the short ribs.

#### RAILWAY DEPENDENCE ON ELEVATORS.

Mr. Dunn, Western editor of the "Railway Age Gazette," writing on "Grain Handling in the U. S." for his own paper, is as frank as he is interesting; for the railway man's unsophisticated views of railway relations to the country elevator are always interesting—when obtainable. It is pleasant to know that—

the presence of elevators on its lines was advantageous to the railway. Grain could be accumulated in the elevator until there were several carloads and then poured rapidly into the cars. This made delays to rolling stock less than when the grain was shoveled from the farmer's wagons into cars or was transferred direct from the farmer's wagon to the cars in sacks, etc.

Then came the terminal elevator, the advantages of which "were early recognized to be equally great." It is true these advantages were enjoyed to some extent by the country shipper as by the railroad; but Mr. Dunn, it is clear, recognizes the fact that fundamentally the railroads were greatly benefited by the country elevator, and still are.

Why, then, should the railroads not only build the terminal elevators and rent them substantially without cost to private operators but at the same time require the country grain shipper not only to build his own house but to pay rental for an otherwise useless site on the right of way and to enter further into an engagement, as is often required, to waive all claims for loss or

damage done to his property by fire, etc., caused by the railways' locomotives or the acts of its employees? It is a jug-handled arrangement, fair in no respect, and obtains only because the country shipper is hardly in a position to stand on his ethical rights.

#### FIGHTING FIRE.

The most effective fire-fighting apparatus is the simple devices whose presence about an elevator, say, indicate a state of careful preparedness for meeting instantly emergencies of danger. The familiar hand-grenades and extinguishers of various types are useful. The Millers' National Insurance Co., in a recent circular, cites a case of an elevator at Vining, Kan., saved recently by a chemical extinguisher. The fire was caused by an explosion of bi-sulphide of carbon gas in a bin of wheat, the man thus treating the wheat for weevils having a lantern in his hand. The loss was \$25, the insurance involved being \$11,800. So that extinguisher paid.

Brine barrels, kept full, with pail at hand, are quite as good as, perhaps better than, the extinguishers. At any rate, the same circular cites the case of an elevator at Brown City, Mich., that was saved by bucket and half a barrel of brine. The elevator had taken fire from friction at the wood pulley in the boot. Wooden pulleys should never be used in such a place, to begin with, and had been ordered out of this elevator, but were still there to make trouble. The loss was \$295.31, against insurance of \$24,000.

In a mill at Madelia, Minn., a fire caused by ignition of dust in the coils of a wheat drier was put out by buckets and brine, saving \$98,000, with a loss of only \$50. In another mill, at Lutesville, Mo., a fire originating in a lantern place in a flour bin, was put out by buckets and brine; loss \$22.55; insurance involved, \$10,000. Other cases might be named.

It is hardly necessary to say that these few instances constitute "a striking lesson." The question is, rather, are you, reader, similarly protected at your elevator by these simple and cheap, but effective, enemies of fire?

#### THE MISSOURI RIVER RATE CASE.

The immediate interest of the grain trade in the Missouri River Rate Case, recently passed upon by JJ. Grosscup and Kohlsaat at Chicago is in the question to what extent the decision, if sustained at Washington, will strip the Commerce Commission of its powers. The judges declare that what the Commission sought to do was to determine whether a rate fixed by the railroads between the Atlantic Seaboard and Missouri River is or is not reasonable, and that that is equivalent to a control over the rate, and that is not a power lodged with the Commission. And wisely so, in the court's opinion, because it is equivalent to "control over every trade or industrial center in the United States." If the Supreme Courts agree with Judge Grosscup, the railroads will simply reassume absolute control over the rates without much regulation or restraint, a condition from which the country has been trying for a decade to break away. It may or may not, in the opinion of many, be advisable to lodge the power of regulation and

control over rates in the Commerce Commission; but since the experience of the past has demonstrated that the exercise of a "general power of life and death over every trade and manufacturing centre in the U. S." cannot be safely restored to the carriers themselves, if the courts decide that the Commerce Commission has not been vested with regulative control, some new means will have to be sought to accomplish the intent of Congress.

#### THE MISSISSIPPI RIVER.

Theory must always side-step to fact, when fact is present. The thought is suggested by Mr. Breed's explanation of the disappearance from business of a Mississippi River carrier which at a certain period of our *post bellum* commercial history did a large and lucrative business. The story is a typical one of water transportation. Herbert Knox Smith, Commissioner of Corporations, in his discussion of water transportation (Report on Transportation by Water in the U. S.), puts it in a different but equivalent way (Part II, p. 162): "The movement of grain and flour and the routes of transportation have changed from time to time with the development of the country," and, as he adds, though in not so many words, with the changes in the demand and supply of fluent commodities.

In the early decades of the last century the Mississippi was an important highway, whose importance, however, began to decline as soon as the opening of Erie Canal developed the lake route and the railroads developed the power to compete for the traffic to the seaboard. Many efforts have been made to revive the river traffic since its decline, but all have been unsuccessful. Why?

Is it not because, as Mr. Breed has shown, the traffic is not there? Or is it because more grain now crosses the river than flows with it? Or is it because the grain is now produced not on or near the river but at a distance, so that it is no longer profitable to give part of the haul to the rails and part to the river or canal, with the intermediate transfer? This transfer is only profitable when the haul is direct to the seaboard, like the Duluth-Buffalo lake haul, for on such a route every mile the grain is moved by lake results in its being practically brought one mile nearer the seaboard, whereas on a route like the Chicago-Buffalo route every lake mile is but 0.564 of an eastward movement of the grain compared with the direct rail route.

This paper believes in waterways and the making of more of them; but Congress will never, it is believed, set aside the report of its own employees, the War Department engineers—that the deep waterway would be valueless because there is no traffic to use it—until the advocates of deep waterways look fact squarely in the face and make their theory toe the mark alongside of fact, by showing where the traffic is to come from to warrant the vast expenditure of money asked for by the "Fourteen Feet through the Valley" men.

It may be of some interest to the reader to know that the Chilean nitrate trust has collapsed and that the price of nitrates has in consequence materially declined.



## EDITORIAL MENTION

Keep in the good graces of your receivers by forwarding shipping documents promptly—by earliest mail always.

It appears that Duluth inspectors have already begun to permit the mixture of the Velvet Chaff wheat with Hard Spring and Northern. Will they let in Durum next?

Before the new crops begin rolling in on you, have your scales tested by an expert and repaired if need be. Don't rob your patrons nor yourself by using scales that are out of order.

One of the earlier problems of the coming bankers' convention at Chicago will be the "uniform bill of lading," which like old Banquo's ghost still "bobs up," to mix the "literary allusions."

Mr. Timmons's scoring of the hay grading was timely. The Hay Association must get away from pretence in this matter, and if the grading rules are not lived up to by the trade they should be abolished or some machinery devised for making them effective.

The Dominion Millers' Association has joined the farmers of the West in a demand for government "effective control" of the Canadian terminal elevators in order to check the "manipulation" of grain passing through them. The Canadians are afraid, they think, of "American methods."

There are various reasons why the wheat acreage of England should have declined from 3,993,000 in 1861 to 1,786,000 in 1908; but the fact that in the meantime the average yield per acre has increased from 22.2 bus. in 1861 to 30.1 bus. in 1908, has its lesson and encouragement for American farmers of the right sort.

The first corn imported from Manchuria reached Seattle in August—1,000 bags, to go into corn starch at a Coast factory; and a "heavy trade is predicted" on the basis of this shipment. Meantime, corn is going from the interior to the coast for export at Durban, Natal, South Africa, in such quantity that the railway has been blocked and a temporary embargo has been called! And still there are those who think the U. S. not only "commands" the grain markets of the world now but always will!

Seven members of the National Waterways Commission have sailed for Europe to spend the remainder of the summer and early fall in a delightful jaunt over continental Europe investigating rivers, harbors and canals and waterways transportation generally. If the Commission can but be made to see on their trip that this country does *not* need a 25-ft. channel for lakes or ocean steamers between Chicago and New Orleans, but *does* need several thousand miles of waterways about nine or ten feet deep in the Mississippi Valley, equipped with wharves and loading and unloading machinery, available to shippers at a

nominal cost, the expense to the Nation of the interested picnic will be money well invested.

Supt. Chamberlin's plan for bettering the quality and improving the adaptability of seed to a given habitat in South Dakota is not ill-timed or impossible of accomplishment anywhere. The dealers ought to be able to make it profitable to reserve for seed at least a part of the best grain they receive. Farmers, as he says, will not take pains for themselves, but they will pay good prices for good seed if they can get it without too much trouble. Where, then, seed is usually scarce, why not do a little business in seed on the side?

The hay men of New York are discussing the desirability of appealing to the government to find a remedy for the short weight nuisance. Why cannot existing laws be appealed to when a man tags and sells a bale of hay for 220 lbs. when in fact he knows, or ought to know, that it weighs only 190 to 200 lbs.? There is no need of more laws to punish such acts. If, as the hay men contend, "the short weight evil has assumed large proportions," the more the need of heroic action; and for this the laws of all states will be found ample.

Wiring an elevator properly is a sure preventive of fire or damage by lightning. But the wiring cannot be put up by the "hit or miss" method. A large and high building, isolated, as most elevators are, cannot be protected by the same defenses against lightning that would answer for a small and low building. Like draining land, the wiring of each elevator is a separate problem which should be worked out by one familiar with such engineering. This sounds more formidable than it is; but it pays to be right in this as in other matters of equipment of valuable premises.

Harry Kress proposes the apothegm that, "The successful country merchant is the one who can make more money on the off-grade goods than on grain which is of good quality." In this respect the country dealer should take a card from the hand of the merchandising elevator man at the terminal, who does that very thing. He doesn't pay more than the kind of stuff is worth "just to hold his trade"—not he. He inflicts the penalty for off-grade deliveries on "3 or better" to the letter and the limit, and makes his cream on that end of his business; why doesn't the country dealer do the same?

While two Iowa dealers were "rowing among themselves" to the extent of cutting each other with knives and getting into the criminal court, two others, rivals in trade in Kansas, were breaking into the courts with their personal grievances. In the latter case the dirty linen is being exposed to the populace in a way to excite the gaiety of the people as well as some prejudice. As for example, the defendant in his answer files certain letters of the complainant which would indicate that he, the complainant, had "formed a combination" with certain other dealers and entered into an agreement as to prices to be paid for grain and the division to be made of the grain handled by both; and also to shut up certain elevators, etc.; and so on.

Now, what does it profit a man to gain a few dirty dollars and lose the respect of his competitors and the confidence of his patrons?

Edwin Beggs of Ashland, Ill., has done the trade a great service by obtaining a ruling from the Commerce Commission that the shipper may specify the size of the car he may need. The tendency of the carriers to run car building to large sizes only threatened serious inconvenience to both consumers and shippers; so that the order in the Beggs case and that of the American Creosoting Works, Ltd., vs. I. C. R. R. Co. decided by the Commission in February (No. 1764), ought to put a limit to this tendency. Cars should be of various sizes to fit various needs, with a reasonable minimum of course to be determined by experience.

The politicians are still on the *qui-vive* of expectancy. Is Inspector Cowen's scalp to hang at some one's belt? Ed. St. Clair, who probably knows the difference between a sack of durum and a hayfork, but who has never been known to have studied grain inspection except lately at his desk as secretary of the Republican State Committee, in the intervals of more important business, is the only applicant for Mr. Cowen's place; and one wonders whether the Governor and the new edition of his Warehouse Commission will be equal to this assault on the efficiency of the inspection department, now brought up to a high and satisfactory level for the first time in at least twenty years.

While a number of co-operative elevator companies in the Northwest and some in Iowa and Illinois have made some money, we find the annual reports at the close of the crop year are more frequently non-committal this season than usual. We infer that they have not generally made money, since all such concerns take much delight in publishing the figures when they are "worth while." In certain cases the profits reported would be possible only by conceding prices paid for grain that would cause the biggest kind of a row were a regular dealer to offer the same prices. The "farmers' elevator," in fact, under the stimulus of an active propaganda for the purpose by interested commission houses in one or two markets, has gotten to be a sort of habit that will run its course and bring some real pain before it "comes to a head and breaks."

The Texas Farmers' Union has adopted its president's recommendation to sell no cotton seed to any Texas mill but to export all of it, the president claiming that the foreigners will pay from \$4 to \$6 per ton more than the home mills. This seems absurd and doubtless is; sane business men do not make any such discriminations. However, the animus behind the restriction is not different from that behind Senator McCumber's alleged purpose to resume his fight on the wheat and flaxseed drawback law, that would enable American flouring and oil mills to continue in business when American raw materials became scarce or exhausted. The readiness with which this type of men, like Artemas Ward, will "sacrifice all their wife's relations on the altar of their country" is equalled only by their enthusiasm for the "old flag and



an appropriation,"—or its equivalent! Patriotism in Texas and North Dakota seems to stop at the pocketbook.

The "menace of the rat" is no idle fad of the sensational paper. It is a real thing. Not only is the rodent's living an immense tax on the people, but his presence is a threat to the health of every community in which he lives. Trichinosis and plague seem to owe their epidemic prevalence entirely to the rat, while a report of a diphtheria epidemic at the Hospital for Insane at Middletown, Conn., indicates that the rat can be a large factor in transmitting other communicable diseases. The most effective method of getting rid of rats," says the Connecticut State Board of Health, "seems to be the use of one of the bacteriological poisons, particularly Neumann's virus or Danyse's virus, which set up a communicable disease among rats from which they quickly die in the open air and away from their haunts. In England whole islands and villages have been cleared of rats by distributing bread dipped in a bacteriological broth near their runs. The advantage of these poisons is that they are harmless to humanity and domestic animals."

The first of the deep canals to be finished on this continent (barring the Soo channels) will be the Erie barge canal. If any canal can test the question of waterway transportation it will be that canal. It will tell whether New York is losing her grain trade from natural causes, inherent in the changing conditions of trade and commerce or because of the machinations of those arch enemies of New York, the Buffalo trunk lines, which insist on making rates so high that export grain is all going out through Montreal, a port now so busy that the Harbor Commission wants another elevator at once. The completion of the Erie canal will confirm or smash a good deal of waterway theory. As that event is now near its consummation, might it not be well for the New York Produce Exchange to wait a few days before selling its great building and dividing up the proceeds? It may turn out when the canal is finished that the apparently dwindling business has not all gone to the dogs but may be merely suspended until the big barges can get through from Buffalo to tidewater.

Western Trunk Line Circular I-B amends the rules to provide for a "shrinkage allowance" of  $\frac{1}{8}$  of 1 per cent on all grains, except corn and  $\frac{1}{4}$  of 1 per cent on corn, this deduction from the face of claims to be made at points having recognized state, board of trade or W. R. W. Association weights. This is a revival of a practice of skinning claims that was all but abandoned throughout the country until its revival and formal recognition in the Commerce Commission's indefensible "uniform bill of lading." Chairman Talbott of the Western G. D. Ass'n suggests as a compromise a flat "wastage allowance" of 50 lbs. a car as a better and fairer proposition than the percentage rule. Any fixed amount would be an arbitrary one, since no man living can state what would be the "natural shrinkage" of a car of grain, or whether there would be any such shrinkage whatever, in the course of the prompt and careful service for

which the shipper pays but which he rarely if ever gets. A shrinkage that in 99 per cent of the cases is due wholly to the carrier's own acts or to the deficiencies of its equipment, ought not to be taxed to the shipper in any amount. In Illinois the deduction is forbidden by law, and probably the courts of other states would not recognize it as legal.

It is said the Commerce Commission is thinking of attacking the new Western tariffs that pay the  $\frac{1}{2}$ -cent allowance for the transfer of grain through lake elevators, which one of the Commission thinks is unlawful. Certainly, of all the mischievous practices of railways this "allowance" business is the chief. It is like many a demagog's economic theory in that it has a shadow of justification as a payment for a service, and yet every man in the grain trade knows that at bottom it is but a pretense, that it is but a means for giving an advantage that goes only to the merchandising elevator and is not enjoyed by others. In effect it is a rebate of a certain amount, however indefinite, and gives the recipient an advantage that differentiates him as a shipper from all other shippers similarly circumstanced otherwise. It is probable that the only ultimate solution of this problem may be to require the carrier by law to act as public warehousemen for grain, in the simplest sense of such service; but even that would be a contingency from which one might well recoil.

Commenting on the folly of paying too much for inferior grain, as many dealers have been doing this fall for wheat and oats, Zahm & Co. say quite wisely:

While we don't deal with farmers we know how hard it is to convince them that they are being paid full value for their grain; but as far as the friendship feature is concerned, we know positively that it does not amount to much with many farmers. They would just as soon sell to some one else who is not so much of a friend if they get one cent per bushel more, and many would not hesitate to sell to a scoopshoveler at  $\frac{1}{2}$  or 1 cent per bushel more, even though the scoopshoveler is at a station a few weeks, doesn't pay rent in the town, has no money invested, pays no taxes, etc. So we believe it is best for shippers to buy the grain right, and if the farmer does not like it let him do the other thing.

Farmers are no different from other people. In money matters friendship does not, as a rule, go very far. We will all sneak around the corner out of sight of our friend to buy a little cheaper of a stranger or to sell a little higher. The safest rule is always the proper business rule—to treat oneself as fairly as one treats the other fellow and *vice versa*, only not "more so" in either case. Then each is fairly treated, and the deal is concluded in mutual respect and confidence.

There is a "natural shrinkage" of grain while stored in the elevator. Every year the Illinois state officials are called on to cancel warehouse receipts for grain—sometimes the amounts are enormous—that has disappeared by "shrinkage" while in store. This shrinkage takes place in the country elevator as well as in the terminal house, but to less amount for perfectly obvious reasons. To whom does the country elevator man who "stores" the farmers' grain and actually holds it in store charge this shrinkage—to the farmer or to himself? If country "storing" were anything else than a

mere pretence for getting hold of the farmers' grain by giving the farmer a "put," this shrinkage alone would bankrupt every country dealer who practiced storing; for no farmer would stand for the "shrinkage" for a minute at settling time, although he knows well enough it takes place, nor would he stand on delivery day for the old privilege of the terminal elevators, for which Baltimore is still contending, of taking the "shrinkage" out of the grain by an arbitrary secret dockage as the grain goes into the house. Don't encourage shifty practices of this kind. Use your house for your own business and insist on the farmer becoming the custodian and caretaker of his own grain—both you and he will make money by the process and both will enjoy "nights devoid of care" and remain better friends.

A bulletin, the public is informed, is about to issue from the Agricultural Department to demonstrate that the stories of the wearing out of American farm lands are all "punk." Prof. Whitney, head of the Bureau of Soils, will demonstrate by figures that the yields of farm products from 1867 to 1906 inclusive (including the era of the subduing of the richest lands on the continent—wise Professor!) demonstrate the contrary. In view of Prof. Whitney's concession that "soils do wear out," and the known condition of old soils in the South, in New England, in the middle Atlantic states and even in the older portions of Illinois, one can hardly see the practical value of the bulletin's denial that our farm lands of the country under our past and present system of farming are in fact wearing out as such men as Prof. Hopkins of Illinois has shown the farmers of several states. All economists recognize the fact that American farming, like American lumbering, and American coal mining, is but one of the many American processes for skimming off the cream. Men like Prof. C. G. Hopkins have told us that unless we change our methods soon and radically, of which there are now only tentative indications, we shall go on skimming off the cream of our lands' plant food resources until we are driven to the skim milk everywhere as have been the planters of Maryland, Virginia, Georgia, Alabama, etc., who at this moment are farming worn out lands. Our teeming population compels the cultivation now of all our lands, and already we see in the advancing land rentals a growing scarcity of fertile and accessible acres. Two of the great staples of American farms, cotton and wheat, have been notable land consumers, insatiable in their consumption of soil fertility and in their demands for virgin lands to maintain their places in the crop records that Prof. Whitney will quote and have saved their record only because they have been able to keep on invading new lands. Our corn is slower in its work of depleting the soil but it, too, is doing that. It is time, then, that instead of boasting of our great production at so tremendous a cost we deprecate rather our present methods (and our bragging about their results) and turn our attention seriously to the kind of farming that will give the Americans of tomorrow a little of the cream our farmers of today are enjoying but of which they are robbing their children and grandchildren.



## TRADE NOTES

M. Dimitri Lichatscheff of Odessa, Russia, wants data and prices on elevators for loading grain.

Among the exhibitors at the Kentucky State Fair, now being held at Louisville, is the Hagan Gas Engine & Mfg. Co. of Winchester, Ky.

Sprout, Waldron & Co., of Muncy, Pa., are exhibiting an extensive line of their products, including the widely-known Monarch Attrition Mill, at the Empire State Fair at Syracuse, N. Y., September 13 to 18.

Treasurer M. L. Barbeau, of the S. Howes Company of Silver Creek, N. Y., is now at Denver, Colo., where he will reside for the next few months. Mr. Barbeau's city address in Denver will be 1027 East Colfax Avenue.

The Victoria Elevator Company of Minneapolis is building two new elevators in North Dakota to be ready for the new crop. One is at Fessenden and the other at Anamoose. Moulton & Evans of Minneapolis have the contracts for the construction work.

Bulletin No. 6 of the Williams Patent Crusher and Pulverizer Company, of St. Louis, Mo., gives a full description of the new Williams Universal Grinder. The claim is made that the Williams Universal Grinder is unequaled for grinding snapped corn, ear corn, shelled corn, corn by-products or any other cereal.

As a result of the renumbering of the Chicago streets the address of Olson Brothers & Co., grain elevator builders, has been changed to 2418-22 Bloomingdale Avenue. The Chicago address of the Webster Manufacturing Company has also been changed, being now 2410-2432 West Fifteenth Street, instead of 1075-1111 West Fifteenth Street, as heretofore.

During the "Old Home Week" at Silver Creek, N. Y., last month, many of the old-time employes of the machinery firms of that place met fellow workers whom they had not seen for years. On August 20, through the efforts of C. N. Howes and C. H. Sterling, a large group picture was taken of the men who worked in the factories twenty-five years ago.

The American Consul at Calais, France, reports that an engineer in his district has asked for the names of some good American manufacturers of stationary gas, oil or gasoline engines. He wishes to get into touch with houses who have no representatives in Europe, as it is impossible to sell engines in that region after they have passed through several different agencies.

The Union Iron Works of Decatur, Ill., have exhibited the various types of their "Western" corn shellers at the Iowa and Nebraska State Fairs this month. At the Iowa State Fair at Des Moines the exhibit was in charge of the Dukehart Machinery Company of that city. David Bradley & Co. of Council Bluffs, Iowa, had charge of the Company's exhibit at the Nebraska State Fair at Lincoln.

The American Machinery & Construction Company of Milwaukee, Wis., has received an order for a No. 7-S American Cyclone Aspirator of all steel construction to be installed in the new malting plant which is being erected at Milwaukee for D. D. Weschler & Son. This machine will be used to separate all sprouts, chaff, dust, etc., from the malt as it comes from the kiln, and also to cool malt which is unloaded at too high a temperature.

Among the exhibitors at the Iowa State Fair, held from August 27 to September 3, at Des Moines, was the Marseilles Manufacturing Company of Marseilles, Ill. A full line of the Company's goods, including hand and power corn shellers, portable grain elevators and dumps, feed grinders, horse powers, etc., was on exhibition. The John Deere Plow Company was in charge of the display. The latter company also had charge of the Marseilles Manufacturing Company's exhibit at the Nebraska State Fair, which was held at Lincoln from September 6 to September 10. At the South Dakota State Fair at Huron, September 13 to 18, the Com-

pany's exhibit, which embraces a full line of Marseilles goods, is in charge of the Deere & Webber Company of Minneapolis.

The Burrell Engineering & Construction Company of Chicago announces the following recent contracts: Remodeling of the elevator recently taken over by the D. Rothschild Grain Company at Davenport, Iowa; addition to elevator at Keensburg, Ill., for Schultz & Bump; addition and repairs to elevator at Philo, Ill., for H. E. Parsons.

A recent Consular Trade Report gives the following foreign trade opportunity for dealers in clover seed: "A wholesale seed dealer informs an American Consular officer in Belgium that he is especially engaged in the sale of violet colored clover seed, and would like to enter into negotiations with American exporters of this seed and other fodder seeds. The Consular officer supplies the name and address of the inquirer." Clover seed dealers who are interested may obtain the name and address of the inquirer by writing to the Bureau of Manufactures at Washington and mentioning "Inquiry No. 3987."

The Field-Brundage Company of Jackson, Mich., is exhibiting the Field Gasoline Engine at several state fairs this month. At the West Michigan Fair, held at Grand Rapids, September 13 to 17, the exhibit is in charge of Samuel Shore. At the Iowa State Fair, which closed at Des Moines on September 3, the exhibit was in charge of the Finkbeiner-Turney Company of Freeport, Ill. At the Indiana State Fair at Indianapolis, September 6 to 10, the Kenney Machinery Company of that city was in charge. The Finkbeiner-Turney Company of Freeport, Ill., is now in charge of the Field Gasoline Engine exhibit at the Wisconsin State Fair at Milwaukee, which closes on September 17.

### A MICHIGAN ELEVATOR.

The elevator of F. A. Dunham & Co., at Turner, Mich., shown in the accompanying picture, like many other "elevators" in that state, are what might be called "general utility" plants, it being necessary at their construction, or from time to time thereafter, to make provision for handling a variety of products other than grain. Dunham & Co., for example, are buyers and shippers of grain, beans, hay, seeds and potatoes as well as wool, and sell to their customers coal, cement and other supplies.

Their elevator has storage capacity for 12,000



F. A. DUNHAM & CO.'S ELEVATOR, TURNER, MICH.

bushels and is equipped with two Clipper Cleaners, No. 8 Bowsher Feed Mill, 20-set Clipper Picking Machine for beans, Fairbanks-Morse 5-h.p. Gasoline Engine, two Fairbanks Hopper Scales, one of 60 and one of 70 bushels' capacity, and one 8-ton wagon scale.

The hay shed has room for 15 cars of hay in bales, and other buildings on the premises are amply large and convenient for the uses demanded of them.

The Oklahoma broom corn season opens with brush at \$60 to \$65 per ton.

Under the new law of North Dakota no grain buying firm will be permitted to issue storage tickets for more than the amount of the elevator's bond, combined with the actual value of the grain in such warehouse or elevator. "This will mean," says the country editor, "that when the farmer comes in the fall to cash his tickets there will be some assurance that he will get his money."

### WM. WATSON.

Wm. Watson, who has been appointed agent and representative of the S. Howes Company for Chicago and tributary territory, is not only an accomplished millwright and draftsman, but as well informed a man on the S. Howes Company's line of machines as may be in the Company's employ. In fact, he has been raised with the company, so to say, his first recorded employment being, at the age of nine years, to watch the feed hopper to a Eureka Smutter, imported from Silver Creek, running in the mill of his uncle in Wollerton, Shropshire, England. When the boy had completed his school education he was taught millwrighting by



WILLIAM WATSON.

another uncle at Shrewsbury, and then he went to London, where he obtained a place in Howes & Ewell's London office, then in charge of L. E. Barbeau, now president of their successors, the S. Howes Company.

As representative and erecting millwright for Howes & Ewell and their successors, Mr. Watson has installed the Eureka machines in all parts of Europe, in the Levant, and in North Africa, setting up among others an upright Eureka Smutter in the Holy City, Jerusalem.

Having acquired to some degree the "wanderlust," Mr. Watson resigned his place in the London house and came to America, traveling at first quite widely in Canada. Finally he reached Buffalo, and naturally enough went out to Silver Creek, the home of the machinery he had placed on so many corners of the world, and there naturally enough he was engaged for the American service of the Company. He was assigned to the East, and had his headquarters for the time at Green's Hotel, Philadelphia, until his transfer to the West, with headquarters at Chicago.

### RARA AVIS.

The Jay Grain Company, of St. Marys, O., announce their discovery of one of nature's noblemen, says a local paper. He is a citizen of Indiana, residing on his farm near the company's mills and elevator at Mulberry, Ind.

A letter received on April 21 from the manager at the above place, states the nobleman to which reference is made, as refusing to profit by the then present record price of wheat, saying he would take \$1.10 per bushel and no more, for bread-stuff.

One day afterwards he delivered a load of wheat to Mulberry, had it weighed and inquired the price. Informed that the company was paying \$1.30 per bushel, he expressed himself in emphatic language against what he considers the exorbitant figure, at



the same time mentioning the maximum price he would receive. His objection to the current quotations was the hardships worked on poor people in purchasing the staff of life.

The elevator man had no instructions covering this particular case, but ventured to ask the benevolent husbandman his desire regarding the disposition of the balance remaining in his favor in case he was paid according to his desire. He said, "Give it to the poor people." The elevator man wrote to headquarters for definite instructions.

For the present credit is bestowed on a settlement of Dukard's in the vicinity, some of whom are noted for kindly acts causing the average person to sit up and notice.

### WILLIAM SMILLIE.

Wm. Smillie, who since 1882 had been chief supervising inspector of the Illinois Grain Inspection Department, on September 1 retired from the office, owing to physical disability, the result of a long-ago injury to his left leg while in the performance of his duty, which now prevents his standing to work. Mr. Smillie entered the office in 1872 and ten years later was made chief supervising inspector, a position he continued to hold until his resignation took effect. His record is perhaps without an equal in this country unless it be that of John Foehring, late chief inspector at Philadelphia, whose period of service was, we believe, somewhat shorter. That Mr. Smillie should have thus survived in the melee of politics that for all these years dominated the management of the office is a high tribute to his ability, his reliability and for many years his indispensableness to the long succession of chief inspectors who knew less of grain inspection than Mr. Smillie did of practical politics.

Mr. Smillie was born in Scotland in 1840 and came to America in 1860. He at once obtained employment at the old Galena Elevator. When employed by Munger & Armour a year later to superintend the loading and unloading of vessel grain, he had the question of inspection forced upon him by the necessities of his own position, and he soon became an expert judge of grain, and he was one of the first men in his business who seems to have reduced inspection to a science of judgment by preparing himself by close comparative study of grain.

Mr. Smillie was married in 1861, and only two of his seven children are now living, Thomas, who is now an employe of the office the father has just retired from, and a daughter, wife of Frederick Peck, with the Armour Grain Co.

The first car of 1909 No. 1 Northern wheat arrived at Duluth on August 24 and sold at \$1.05. The car came from western Minnesota and was of excellent quality.

Minneapolis commission men have been putting in new tickers of an improved sort, hitherto used to any great extent only in New York. They abolish the use of the old key-board method of transmission.

There is considerable interest in winter wheat in Iowa, created by the good results of last fall's plantings, and its culture is recommended by the Ames station in a recent bulletin as "fitting into Iowa rotation very satisfactorily."

The first samples of this season's English wheat were offered, on August 12, at Bristol Corn Market, but at prices which millers regarded as prohibitive. Moreover, it was not considered to be in such good condition as was the early wheat of last summer.

The elevators at Kingston, Ont., have been having a poor season thus far, the deliveries there being the lowest since 1884. Last year about 15,000,000 bushels were handled, but this year only about 25 per cent of that amount has been received.

A carload of wheat was sold on the Winnipeg Exchange recently that had been stored at Fort William since 1904, owing to litigation growing out of the bill of lading. Though the price was \$1.16 a bushel, it netted the farmer 51 cents a bushel, not taking into account court costs and attorneys' fees, which put the farmer out thousands of dollars.

### RECEIPTS AND SHIPMENTS.

Following are the receipts and shipments of grain, etc., at leading receiving and shipping points in the United States for the month of August, 1909:

**BALTIMORE**—Reported by H. A. Wroth, Secretary of the Chamber of Commerce.

| Articles               | Receipts  |           | Shipments |           |
|------------------------|-----------|-----------|-----------|-----------|
|                        | 1909      | 1908      | 1909      | 1908      |
| Wheat, bushels.....    | 1,369,883 | 2,775,675 | 1,232,000 | 2,820,860 |
| Corn, bushels.....     | 167,736   | 184,878   | 16,971    | 22,003    |
| Oats, bushels.....     | 395,626   | 463,895   | 100       | 134       |
| Barley, bushels.....   | 560       |           |           |           |
| Rye, bushels.....      | 28,516    | 24,275    |           |           |
| Timothy Seed, lbs..... | 7,712     | 5,152     |           |           |
| Clover Seed, lbs.....  | 3,666     | 2,431     |           |           |
| Hay, tons.....         | 3,954     | 4,501     | 1,369     | 1,796     |
| Flour, barrels.....    | 172,832   | 193,743   | 53,185    | 85,558    |

**BUFFALO**—Reported by Fenton M. Parke, Secretary of the Chamber of Commerce.

| Articles                   | Receipts  |           | Shipments |      |
|----------------------------|-----------|-----------|-----------|------|
|                            | 1909      | 1908      | 1909      | 1908 |
| Wheat, bushels.....        | 3,275,325 | 3,012,815 | 943,576   |      |
| Corn, bushels.....         | 2,167,371 | 2,308,527 | 417,047   |      |
| Oats, bushels.....         | 1,009,102 | 451,722   | 340,250   |      |
| Barley, bushels.....       | 51,552    | 346,000   | 253,800   |      |
| Rye, bushels.....          | 42,000    | 65,458    | 25,762    |      |
| Other Grass Seed, lbs..... | 49,747    | 33,036    |           |      |
| Flax Seed, bushels.....    | 499,600   | 486,097   |           |      |
| Flour, barrels.....        | 853,293   | 805,853   |           |      |

**CHICAGO**—Reported by George F. Stone, Secretary of the Board of Trade.

| Articles                   | Receipts   |           | Shipments |           |
|----------------------------|------------|-----------|-----------|-----------|
|                            | 1909       | 1908      | 1909      | 1908      |
| Wheat, bushels.....        | 6,703,268  | 5,552,905 | 6,697,631 | 5,030,280 |
| Corn, bushels.....         | 6,715,600  | 6,599,379 | 5,034,983 | 5,550,114 |
| Oats, bushels.....         | 13,039,150 | 8,400,603 | 7,978,393 | 5,965,511 |
| Barley, bushels.....       | 438,000    | 895,900   | 180,518   | 319,373   |
| Rye, bushels.....          | 112,500    | 149,095   | 29,950    | 73,243    |
| Timothy Seed, lbs.....     | 1,976,898  | 693,687   | 980,804   | 1,863,765 |
| Clover Seed, lbs.....      | 294,930    | 12,550    | 257,691   | 120,632   |
| Other Grass Seed, lbs..... | 1,892,775  | 667,736   | 4,120,269 | 6,199,202 |
| Flax Seed, bushels.....    | 66,000     | 56,400    | 15,311    | 714       |
| Broom Corn, lbs.....       | 847,044    | 799,803   | 440,516   | 900,227   |
| Hay, tons.....             | 17,425     | 22,604    | 1,015     | 794       |
| Flour, barrels.....        | 784,997    | 714,800   | 865,442   | 812,198   |

**CINCINNATI**—Reported by C. B. Murray, Superintendent of the Chamber of Commerce.

| Articles                    | Receipts  |         | Shipments |         |
|-----------------------------|-----------|---------|-----------|---------|
|                             | 1909      | 1908    | 1909      | 1908    |
| Wheat, bushels.....         | 686,540   | 564,566 | 556,246   | 537,334 |
| Corn, bushels.....          | 473,566   | 625,890 | 287,030   | 382,314 |
| Oats, bushels.....          | 1,140,494 | 716,918 | 1,107,132 | 398,480 |
| Barley, bushels.....        | 4,100     | 5,250   |           |         |
| Rye, bushels.....           | 35,246    | 39,114  | 21,082    | 20,284  |
| Malt, bushels.....          | 93,500    | 41,000  | 112,624   | 54,800  |
| Timothy Seed, bags.....     | 1,052     | 1,279   | 2,141     | 894     |
| Clover Seed, bags.....      | 1,474     | 2,129   | 1,899     | 581     |
| Other Grass Seed, bags..... | 12,405    | 19,877  | 7,137     | 8,461   |
| Hay, tons.....              | 7,897     | 11,360  | 4,838     | 8,469   |
| Flour, bbls.....            | 87,556    | 98,744  | 61,080    | 84,250  |

**CLEVELAND**—Reported by M. A. Havens, Secretary of the Chamber of Commerce.

| Articles                    | Receipts  |           | Shipments |        |
|-----------------------------|-----------|-----------|-----------|--------|
|                             | 1909      | 1908      | 1909      | 1908   |
| Wheat, bushels.....         | 161,235   | 301,193   | 19,820    | 82,271 |
| Corn, bushels.....          | 280,757   | 152,101   | 61,758    | 21,284 |
| Oats, bushels.....          | 1,638,163 | 1,127,055 | 100,355   | 59,522 |
| Barley, bushels.....        | 4,772     |           |           |        |
| Rye, bushels.....           | 65,882    |           |           |        |
| Flax Seed, bushels.....     | 4,811     | 4,895     | 175       | 348    |
| Hay, tons.....              | 59,220    | 6,816     | 8,640     | 1,199  |
| Flour, barrels.....         |           |           |           |        |
| By Lake—                    |           |           |           |        |
| Wheat received, bu.....     | 60,000    |           |           |        |
| Flax Seed received, bu..... | 38,000    |           |           |        |

**DETROIT**—Reported by F. W. Waring, Secretary of the Board of Trade.

| Articles             | Receipts |         | Shipments |         |
|----------------------|----------|---------|-----------|---------|
|                      | 1909     | 1908    | 1909      | 1908    |
| Wheat, bushels.....  | 323,804  | 258,470 | 68,618    | 4,420   |
| Corn, bushels.....   | 182,199  | 199,388 | 56,093    | 90,225  |
| Oats, bushels.....   | 439,171  | 498,766 | 32,311    | 124,847 |
| Barley, bushels..... | 1,250    |         |           |         |
| Rye, bushels.....    | 41,213   | 164,554 | 10,918    | 974     |
| Flour, barrels.....  | 20,100   | 24,800  | 30,389    | 9,600   |

**DULUTH**—Reported by Chas. P. MacDonald, Secretary of the Board of Trade.

| Articles                    | Receipts |           | Shipments |         |
|-----------------------------|----------|-----------|-----------|---------|
|                             | 1909     | 1908      | 1909      | 1908    |
| Wheat, bushels.....         | 324,055  | 1,030,477 | 252,738   | 954,125 |
| Corn, bushels.....          | 244,705  |           | 217,642   |         |
| Oats, bushels.....          | 74,984   | 102,988   | 157,157   | 59,894  |
| Barley, bushels.....        | 223,426  | 543,995   | 111,207   | 407,434 |
| Rye, bushels.....           | 86,104   | 102,987   | 15,000    | 67,536  |
| Flax Seed, bushels.....     | 48,604   | 193,645   | 242,668   | 416,452 |
| Flour, barrels.....         | 288,520  | 449,400   | 444,195   | 476,580 |
| Flour production, bbls..... | 22,505   | 29,225    |           |         |

**GALVESTON**—Reported by C. McD. Robinson, Chief Inspector of the Cotton Exchange and Board of Trade.

| Articles            | Receipts |      | Shipments |           |
|---------------------|----------|------|-----------|-----------|
|                     | 1909     | 1908 | 1909      | 1908      |
| Wheat, bushels..... |          |      | 764,800   | 1,965,440 |
| Corn, bushels.....  |          |      | 110,914   |           |

**MILWAUKEE**—Reported by H. A. Plumb, Secretary of the Chamber of Commerce.

| Articles                | Receipts |           | Shipments |         |
|-------------------------|----------|-----------|-----------|---------|
|                         | 1909     | 1908      | 1909      | 1908    |
| Wheat, bushels.....     | 828,300  | 1,212,000 | 416,807   | 579,164 |
| Corn, bushels.....      | 353,900  | 177,000   | 299,523   | 148,854 |
| Oats, bushels.....      | 541,500  | 1,185,200 | 149,620   | 581,060 |
| Barley, bushels.....    | 494,000  | 1,299,200 | 69,300    | 463,236 |
| Rye, bushels.....       | 55,000   | 105,500   | 8,003     | 17,500  |
| Timothy Seed, lbs.....  | 496,988  |           | 336,204   | 116,295 |
| Clover Seed, lbs.....   | 536,140  | 12,500    | 87,110    |         |
| Flax Seed, bushels..... |          |           |           |         |
| Hay, tons.....          | 1,611    | 1,251     | 45        | 36      |
| Flour, bbls.....        | 232,059  | 213,250   | 242,212   | 273,673 |

**MONTREAL, QUEBEC, CANADA**—Reported by George Hadrill, Secretary of the Board of Trade.

| Articles                | Receipts  |           | Shipments |           |
|-------------------------|-----------|-----------|-----------|-----------|
|                         | 1909      | 1908      | 1909      | 1908      |
| Wheat, bushels.....     | 3,630,831 | 4,819,958 | 2,631,760 | 3,303,271 |
| Corn, bushels.....      | 153,975   | 40,100    | 60,032    | 25,772    |
| Oats, bushels.....      | 695,590   | 182,025   | 189,835   | 61,844    |
| Barley, bushels.....    | 21,620    |           | 25,024    | 164,146   |
| Rye, bushels.....       |           | 19,776    |           |           |
| Flax Seed, bushels..... | 37,722    | 64,525    |           |           |
| Flour, bbls.....        | 137,737   | 93,177    | 130,094   | 101,789   |

**NEW YORK**—Reported by H. Heinzer, Statistician of the Produce Exchange.

| Articles                   | Receipts  |      | Shipments |      |
|----------------------------|-----------|------|-----------|------|
|                            | 1909      | 1908 | 1909      | 1908 |
| Wheat, bushels.....        | 1,687,300 |      | 714,715   |      |
| Corn, bushels.....         | 351,175   |      | 42,930    |      |
| Oats, bushels.....         | 2,452,200 |      | 18,631    |      |
| Barley, bushels.....       | 16,375    |      | 10,077    |      |
| Rye, bushels.....          | 113,750   |      | 69,862    |      |
| Timothy Seed, bags.....    |           |      | 3,572     |      |
| Clover Seed, lbs.....      | 8,040     |      | 2,792     |      |
| Other Grass Seed, lbs..... |           |      |           |      |
| Flax Seed, bushels.....    |           |      |           |      |
| Hay, tons.....             | 24,158    |      | 8,324     |      |
| Flour, bbls.....           | 576,100   |      | 179,416   |      |

**OMAHA**—Reported by F. P. Manchester, Secretary of the Grain Exchange.

| Articles             | Receipts  |           | Shipments |           |
|----------------------|-----------|-----------|-----------|-----------|
|                      | 1909      | 1908      | 1909      | 1908      |
| Wheat, bushels.....  | 1,761,600 | 2,103,600 | 855,000   | 1,233,000 |
| Corn, bushels.....   | 2,399,100 | 1,316,700 | 2,286,000 | 870,000   |
| Oats, bushels.....   | 382,400   | 1,083,200 | 181,500   | 421,500   |
| Barley, bushels..... | 15,000    | 2,000     | 7,000     |           |
| Rye, bushels.....    | 7,000     | 6,000     | 3,000     | 4,000     |

**PHILADELPHIA**—Reported by Frank E. Marshall, Secretary of the Commercial Exchange.

| Articles                | Receipts |           | Shipments |           |
|-------------------------|----------|-----------|-----------|-----------|
|                         | 1909     | 1908      | 1909      | 1908      |
| Wheat, bushels.....     | 788,115  | 1,493,733 | 340,884   | 1,496,218 |
| Corn, bushels.....      | 77,166   | 111,940   |           |           |
| Oats, bushels.....      | 544,032  | 734,711   |           |           |
| Barley, bushels.....    | 1,000    | 2,000     |           |           |
| Rye, bushels.....       | 899      | 3,200     |           |           |
| Timothy Seed, bags..... |          | 965       |           |           |
| Clover Seed, bags.....  |          | 47,200    |           |           |
| Flax Seed, bushels..... | 82,400   | 6,611     |           |           |
| Hay, tons.....          | 6,964    |           |           |           |
| Flour, bbls.....        | 282,551  | 234,866   | 96,417    | 111,966   |

**SAN FRANCISCO**—Reported by Wm. B. Downes, Statistician of the Merchants' Exchange.

| Articles              | Receipts |      | Shipments |      |
|-----------------------|----------|------|-----------|------|
|                       | 1909     | 1908 | 1909      | 1908 |
| Wheat, centals.....   | 100,110  |      | 971       |      |
| Corn, centals.....    | 2,495    |      | 643       |      |
| Oats, centals.....    | 33,330   |      | 40        |      |
| Barley, centals.....  | 439,360  |      | 338,590   |      |
| Rye, centals.....     | 435      |      |           |      |
| Flax Seed, sacks..... | 555      |      |           |      |
| Hay, tons.....        | 21,816   |      | 379       |      |
| Flour, bbls.....      | 50,040   |      | 18,293    |      |

**ST. LOUIS**—Reported by George H. Morgan, Secretary of the Merchants' Exchange.

| Articles             | Receipts  |           | Shipments |           |
|----------------------|-----------|-----------|-----------|-----------|
|                      | 1909      | 1908      | 1909      | 1908      |
| Wheat, bushels.....  | 5,100,000 | 2,769,000 | 3,529,830 | 1,422,140 |
| " bags.....          | 78,510    | 51,601    | 1,100     |           |
| Corn, bushels.....   | 2,036,600 | 1,138,600 | 1,925,890 | 767,450   |
| " bags.....          | 3,028     | 2,148     | 38,640    | 10,630    |
| Oats, bushels.....   | 2,785,600 | 2,825,600 | 1,145,950 | 1,473,480 |
| " bags.....          | 724       | 415       | 40,450    | 29,650    |
| Barley, bushels..... | 10,400    | 49,400    |           | 36,620    |
| " bags.....          |           |           |           |           |
| Rye, bushels.....    | 27,000    | 34,000    | 6,170     | 15,120    |
| " bags.....          | 28        | 344       |           |           |
| Hay, tons.....       | 17,236    | 21,911    | 4,385     | 8,085     |
| Flour, barrels.....  | 332,739   | 275,225   | 326,295   | 306,190   |

**TOLEDO**—Reported by Archibald Gassaway, Secretary of the Produce Exchange.

|                        |           |           |         |         |
|------------------------|-----------|-----------|---------|---------|
| Wheat, bushels.....    | 1,176,000 | 799,800   | 154,100 | 420,100 |
| Corn, bushels.....     | 248,300   | 383,400   | 86,300  | 119,300 |
| Oats, bushels.....     | 1,299,800 | 1,554,000 | 628,600 | 916,300 |
| Barley, bushels.....   | 500       |           |         |         |
| Rye, bushels.....      | 53,500    | 85,000    | 28,100  | 19,100  |
| Clover Seed, bags..... | 636       | 6,515     |         |         |



# ELEVATOR AND GRAIN NEWS

## ILLINOIS.

A new gasoline engine has been installed in the elevator at Kimmunity, Ill.

The contractor has begun work on the E. H. Farley elevator at Baker, Ill.

F. Hettinger has equipped his elevator at Harmon, Ill., with a Hall Grain Distributor.

McFadden & Co. have installed an improved Hall Signaling Grain Distributor at Havana, Ill.

C. A. Fenstemaker, of Walton, Ill., has bought the W. P. Barnes grain elevator at Amboy, Ill.

The Farmers' Elevator Co., at Lowder, Ill., has increased its capital stock from \$7,000 to \$14,000.

W. K. Andrews and A. L. Adams have purchased the elevator at Moweaqua, Ill., of Rodman & Son.

Starne Crossing Farmers' Elevator Co. have a Hall Signaling Grain Distributor at Jacksonville, Ill.

Stephens-Adamson Manufacturing Co., of Aurora, has bought an improved Hall Signaling Grain Distributor.

Burrell Manufacturing Co. has ordered an improved Hall Signaling Grain Distributor, for use at Bradley, Ill.

Weller Manufacturing Co., of Chicago, have purchased two Hall Signaling Grain Distributors for use by their clients.

Mrs. Mary Tieman has purchased the Thomason elevator at Joy, Ill. Her son, William Tieman, will operate the elevator.

L. C. Aston, of Chicago, has gone to Emden, Ill., to enter the grain business with his father, under the firm name of Aston & Son.

Hewitt Rosenstill, formerly of Freeport, Ill., owner of the elevator at Stockton, Ill., has bought the A. Keeler elevator at Kent, Ill.

About fifty farmers in the vicinity of Watseka, Ill., are planning to organize a farmers' elevator company, with a capital of \$10,000.

A farmers' co-operative company is being organized at Ridgefarm, Ill., with a capital stock of \$10,000. A new elevator will be erected.

The new 60,000 bushel elevator near Galesburg, Ill., is now completed. It is situated on the Hennepin canal on what is known as Mill No. 10.

Charles Henn, of Borton, Ill., has installed a No. 8 Western Pitless Sheller, and other machinery made by the Union Iron Works, of Decatur, Ill., as well as a conveyor outfit whereby he can load cars on both C. H. & D. and Vandalia Railroads.

Secretary Strong of the Illinois Association makes the following notice of changes in the grain trade reported to him during July and August: At Terre Haute, Ind., Paul Kuhn & Co. succeeds Bartlett, Kuhn & Co., and at all stations in Illinois; at Morton, Crandall and Groveland, Moschel, Dodds & Co. (mail Morton), succeeds Roberts, Moschel & Mosiman; at Winkle (mail Delavan) and at Delavan and Wayne, Wayne Bros. Grain Co. succeeds Wayne Bros.; at Croft, J. H. Myers succeeds C. M. Woods; at Peoria, Mosiman Grain Co. succeeds Roberts, Moschel & Mosiman; at Abingdon, T. F. Young & Son succeeds C. H. Feltman; at Bardolph, Shenberger & Kyser succeeds A. D. Stanford; at Coatsburg, W. S. Gray succeeds Gray Bros.; at Watkins (Champaign P. O.), F. R. Ludwig succeeds Coon Bros.; at Cairo, Halliday Elevator succeeds H. L. Halliday Milling Co.; at Charleston, Wheatley & Linder succeeds Whalen Bros.; at Hinckley, Farmers' Co. succeeds C. D. Wheeler; at Steward, Farmers' Co. succeeds Titus Bros.; at Carlton, P. A. McGirr has gone out of business; at Buckley, C. E. Babb & Co. succeeds L. W. Singleton & Co.; at Chestnut, F. W. Obermiller succeeds C. H. Ruple; at Lake Fork, Mansfield-Ford Grain Co. succeeds F. W. Obermiller; at Eldena, Fred Glessner succeeds J. Hostoller; at Manhattan, M. P. Ferris succeeds Hargreaves & Godel; at Utica, Van R. St. John has gone out of business; at Osco, F. L. Hough succeeds Samuelson & Westerlund; at Ulah (Souders P. O.), Johnston & Sterling succeeds Frank Hall & Co.; at Toulon, The Davis Grain Co. (mail Galesburg), succeeds Johnston Lumber Co.; at Stark, H. Gorman succeeds Frank Hall & Co.; at Dunlap, E. N. Shroyer & Co. succeeds Frank Hall & Co.; at Oakland, Chas. McEwan succeeds W. S. Van Natta, Jr.; at Cruger, Moschel, Dodds & Co. (mail Morton), succeeds Roberts, M. & M.; at Secor, N. N. Hettinger succeeds Geo. G. Flessner; at Glasford, A. Lightbody & Son succeeds Glasford Grain Co.; at Kernan, Milton Funk succeeds W. H. Perrine & Co.; at Hillsdale, H. H. Palmer succeeds John Butzer; at Amboy, C. A. Fenstemaker succeeds W. P. Barnes; at DeKalb, C. S. Hunt succeeds J. D. McLean; at Carlton (change to McGirr Station),

Ollman Bros. succeeds P. A. McGirr; at Warrenton, C. G. Wieland succeeds C. M. Paxton; at Manteno, West Bros. Grain Co. succeeds Bartlett, Patten & Co.; at Hayes, Ross Woolford & Co. succeeds Barracks, Williamson Co.; at Buckingham, Herscher & Gross succeeds W. J. Herscher; at Janesville, Houser & Sutton is a new firm; at Boos (Boos Station P. O.), J. M. Swick succeeds J. M. Mitchell; at Illinois, Frank C. Brown succeeds James Sellers; at Milmine, Baker & Felger succeeds Felger Bros. & Baker; at Sicily, C. & I. M. Ry., station east of Pawnee, Sicily Farmers' Grain Co. succeeds James L. Brainerd Grain Co.; at Glasgow, Smith-Hippen & McEvers succeeds Byron McEvers.

## IOWA.

A farmers' elevator is being built at Chapin, Iowa. The Hunting Elevator at Hudson, Iowa, has been opened.

The S. H. Samis elevator at Eddyville, Iowa, is completed.

The farmers' elevator at Hurley, Iowa, has been completed.

E. J. Starkey has opened the Skewis elevator at Terril, Iowa.

The Azeltine Brothers have bought the elevator at Alexander, Iowa.

A farmers' co-operative elevator is under consideration at Arnold, Iowa.

The Great Western Cereal Co. elevator at Muscatine, Iowa, has started up.

John Frerichs has installed some new machinery in his elevator at Holland, Iowa.

A. D. Burtis has purchased an interest in the Weimer Elevator at Corinth, Iowa.

Fred Sperling and Will Lyons have bought the Joe Drennan elevator at Corning, Iowa.

The farmers in the vicinity of Storm Lake, Iowa, have organized an elevator company.

Greig & Zeeman, of Estherville, Iowa, have purchased an elevator at Swea City, Iowa.

G. M. Gwynn has sold his grain plant at Essex, Iowa, to N. C. Nelson and G. J. Liljedahl.

Chris. Valliersen has bought the McCall Elevator at Dow City, Iowa; consideration \$3,500.

McVinna & Bell have sold their elevator at Mesena, Iowa, to Johnston Moorehouse & Co.

The Blockford elevator at Oskaloosa, Iowa, capacity 15,000 bushels, has been completed.

J. Peters & Son have secured a five-year lease of the John Tjaden elevator at Wellsburg, Iowa.

M. Frerichs has bought out the grain business of H. Frerichs & Bros. at Grundy Center, Iowa.

Alfred Krusentjerna has sold his elevator at Odebolt, Iowa, to H. W. Reuber and James L. Bruce.

W. H. Sloppy's new elevator at Marshalltown is nearly complete. It will have a capacity of 40,000 bushels.

The Western Elevator Co. is operating the elevator at Dike, Iowa, which was recently reported sold to W. F. Bradley.

The Jackson Grain Co. is building a large elevator at Konigsmark, Iowa, a station on the interurban, four miles from Clinton.

J. T. Spangler & G. H. Burton have united their grain business at Walnut, Iowa, under the name of Spangler & Burton.

The Moore Brothers & Co. elevator at Corinth, Iowa, has opened up for business under the name of the A. A. Moore Elevator Co.

J. P. Baker has sold his lumber, coal and grain business at Searsboro, Iowa, to G. G. Bowens & Son, of New Sharon and Gilman, Iowa.

Chris Williams, of Stratford, Iowa, has purchased a half interest in the Huntley Grain Elevator at Boone, Iowa, and has made his residence at that place.

The M. A. Moore Co. has purchased one of the Gehlen elevators at Le Mars, Iowa. They propose to move it to their lumber yard on the Omaha track.

The Middle West Elevator Co., Council Bluffs, Iowa, will erect a new elevator at that place at a cost of about \$22,000, with a capacity of 125,000 bushels.

The New Providence Co-operative Co. has been organized at New Providence, Iowa, with a capital stock of \$10,000, to buy and sell grain, coal, machinery, etc.

On account of the failure of the Great Western Cereal Co. to operate their elevator on Front street, Davenport, Iowa, in the manner stipulated, the city has ordered its removal.

The Farmers' Co-operative Elevator Co. has been incorporated at Duncombe, Iowa, with a capital stock of \$20,000. J. A. Daniels is president and C. A. Bohenhau, secretary.

A. A. Moore has bought up a majority of the stock of the Moore Bros. elevators in Iowa, and will soon assume control. The houses are located at Hamp-

ton (head office), Chapin, Alexander, Union, Kanawha, Algona and St. Benedict.

The Trans-Mississippi Grain Co. of Omaha has purchased from the Schoeneman Brothers of Hawarden, Iowa, their elevators at Correctionville, Kingsley, Cushing, Galva, Schaller and Early, Iowa.

The Button Elevator Co. of Sheldon, Iowa, owners of several line elevators in Iowa and proprietors of the Sheldon Flour Mills, have bought the DeBeer & Van der Berg elevator at Marshalltown, Iowa.

W. P. Sullivan is making extensive repairs on his elevator at Lineville, Iowa, raising it to the level of car floor, and placing a cement block foundation, also installing Fairbanks automatic scales and engine.

At a meeting of farmers and others at Early, Iowa, in September, the sentiment for the completion of an organization and the erection of an elevator predominated. Inadequate stock subscription is delaying the execution of the project.

## MINNESOTA AND WISCONSIN.

Dan Sherman is building an elevator at Ortonville, Minn.

The Transportation Co. is building an elevator at Oslo, Minn.

A farmers elevator is being constructed at Alexandria, Minn.

The farmers are trying to open an elevator at Anderson, Minn.

James Gribben has bought the steel elevator at Lanesboro, Minn.

T. A. Whiting's elevator at Rochester, Minn., is being torn down.

The farmers at Enfield, Minn., have decided to build an elevator.

The Hanson & Barzen Milling Co. are erecting an elevator at Fox, Minn.

The Northern Milling Co. is now using their new elevator at Wausau, Wis.

Ed. Reinhardt is building an addition to his elevator at Bird Island, Minn.

A. Rasmussen, of Clearwater, Minn., will build an elevator at Hasty, Minn.

The old elevator at Dale, Minn., has been put in condition for receiving grain.

N. J. Mar of Hilbert, Wis., has leased the A. W. Finnegan elevator at Adell, Wis.

The Winthrop Grain & Mill Co. has bought a storage house at Winthrop, Minn.

The elevator company at Gary, Minn., will add a feed and flour shed to the elevator.

The farmers company has purchased the Woodworth Elevator at Brooten, Minn.

The Bensom Grain Co. is doing business at the Peavey Elevator in Elmore, Minn.

The Atlantic Elevator Co., of Minneapolis, has amended its articles of incorporation.

J. L. Denhart of Pipestone, Minn., has purchased the formers' elevator at Hatfield, Minn.

A new elevator is being built in the place of the one which burned down at Maple, Minn.

George A. Tate has sold his elevator at Garvin, Minn., to Peterson & Webb of that place.

A. J. Potts & Co. are putting a sulphur purifying plant into their elevator, at Kasota, Minn.

The new 20,000-bushel elevator of Henry Wattstad, at Echoles, Minn., has been completed.

The Humboldt Elevator Co. has been organized at Humboldt, Minn., with a capital of \$10,000.

A. E. Anderson Elevator Co. has bought the Northwestern elevator at Cottonwood, Minn.

The Farmers' Elevator Co. has been organized at Dale, Minn., with a capital stock of \$20,000.

It is reported that the Peavey Elevator Co. will build an additional elevator at Superior, Wis.

The Western Elevator at Wayburne, Minn., is being torn down to be taken to Hitchcock, S. D.

The Winthrop Grain & Mill Co. of Winthrop, Minn., has opened a warehouse and is buying grain.

The Vining Farmers' Elevator Co. has been organized at Vining, Minn., with a capital of \$10,000.

The Cargill elevator has now been moved from Ronneby, Minn., to Foley, Minn., at a cost of \$1,000.

Andrew Frederickson has bought a three-eighths interest in the Merchants' Elevator at Dodge Center, Minn.

E. A. Everett and G. W. Strong have decided upon erecting a new steel grain tank at New Richmond, Minn.

The American Society of Equity will operate a flat house at Cylon, Wis., this fall, and may build an elevator.

Local people have purchased the Hennepin Elevator at Alberta, Minn., and will conduct a grain business.

The Co-operative Grain Co. has been organized at Minneapolis with a capital stock of \$150,000. E. A. Rovey, L. H. Cornell, C. G. Vaillancourt, Wm. O.



Flory, Jos. Reiter, Anna Ziemer and E. S. Winters are the incorporators.

The Monticello Mill and Elevator Co. has been organized at Monticello, Minn., with a capital stock of \$20,000.

Greig & Zeeman of Estherville, Iowa, have secured control of the E. A. Brown elevator at Keneth, Minn.

A new elevator is to be erected at Fifth street and Twenty-fourth avenue, Minneapolis, for the George C. Harper Co.

The Homestead Elevator Co. of Forada, Minn., has erected a warehouse for the purpose of handling flour and feed.

The old Hubbard & Palmer Elevator at Slayton, Minn., is being wrecked preparatory to its removal to a point in South Dakota.

A. B. Gillette, formerly of Brown's Valley, Minn., has purchased and taken possession of the farmers' elevator at Beardsley, Minn.

The elevator which has been managed by J. W. Funk at Glenwood, Minn., has been sold to the Loomis-Benson Co. of Minneapolis.

The Soo Line is about to erect a 1,250,000-bushel elevator at Duluth. It is to be built of concrete and steel and will cost about \$500,000.

D. E. Roberts, H. E. Tichnor and Archibald McKay have organized the Memidji Elevator Co., Superior, Wis. The capital stock is \$25,000.

F. N. Thiesen of Artesian, S. D., has bought Elevator L in Southeast Minneapolis, and will operate it with F. L. Davis, who is interested with Mr. Thiesen. They will operate as the Lake Elevator Co.

W. B. Gueinzus, manager of the terminal elevator of the Cargill Co. at Green Bay, Wis., has retired from the grain business to devote his entire time to the Cargill Coal Co., of which he is vice-president.

The Equity Elevator Co. of Sturgeon's Bay, Wis., is preparing to handle grain at Egg Harbor, Sister Bay, Ellison Bay, Bailey's Harbor, Maplewood, Forestville, Sawyer and Sturgeon Bay. At all of these points houses have been leased or bought.

#### OHIO, INDIANA AND MICHIGAN.

Repairs have been made on the elevator at North Branch, Mich.

A new modern steel elevator is being erected at Cassopolis, Mich.

Church Bros., of Chicago, have purchased the elevator at Bangor, Mich.

David Lantz has sold his elevator at Montpelier, Ohio, to a Greenville, Ohio, party.

The Waller & Co. elevator at Ft. Branch, Ind., has been completed. It is operated by electricity.

Bad Axe Grain Co. have installed an improved Hall Signaling Grain Distributor at Minden City, Mich.

There is a movement on foot in the vicinity of Titusburg, Ind., to organize co-operative grain elevators.

The Stipp Elevator at Independence, Ind., has been sold by C. C. White to G. L. Merritt of Ross-ville, Ind.

Ypsilanti Machine Works of Ypsilanti, Mich., have ordered a twenty-duct Hall Signaling Grain Distributor.

The Glavin Grain Co., Milwaukee, Wis., succeeds to the business of Chas. F. Glavin, formerly of Escanaba, Mich.

The East Elevator at Goodland, Ind., has been sold by the Remington Grain Co. to A. E. Malsbary of New Richmond, Ind.

Silas and John W. Travis, of Clay City, Ind., have traded their farm for Lewis Schaffer's elevator and grain business at that place.

Arthur Nerreter, formerly in the milling business at Saginaw, Mich., has purchased the Sterling elevator at Bay City, Mich., of Jesse Hamlin.

The Fort Wayne (Ind.) Hay & Grain Co. has filed articles of incorporation. The capital stock is \$25,000. The company will deal in hay, grain and implements.

Articles of incorporation have been filed with the secretary of state at Lansing, Mich., by the Riverdale Elevator Co., Riverdale, Mich., with a capital stock of \$5,000.

H. C. Arnold & Co., of Bluffton, Ind., have purchased the grain interests of W. J. Borrer, at Petroleum, Ind., thereby gaining control of the business at that point.

Crawford & Co. have purchased the elevator at Riverdale, Mich., formerly owned by V. B. Cash. The Crawford Co. also recently disposed of the Vestaburg elevator.

A. W. Douglas, having failed to consummate a deal for the Shelby, Ohio, elevator and mill office, has formed a partnership with his brother-in-law, Mr. Tracht, of Vernon, Ohio. They have bought

the Cox property at the Big Four main street crossing and they will erect an elevator on that site.

A. E. Malsbary has sold his elevator at New Richmond, Ind., to Haywood & Detchen, owners and operators of the Union elevator at that place.

J. W. McCaule of Indianapolis, Ind., and B. E. Page, of New Richmond, Ind., the latter for twenty-two years with the elevator at New Richmond, have bought the grain elevator at Mellott, Ind.

R. F. Peck, of Cassopolis, Mich., has bought the Grand Trunk elevator at South Bend, Ind. He was forbidden to move it to the Michigan Central grounds by the Grand Trunk, who claim it as a fixture.

The farmers near Petersburg, Ind., have organized a corporation, known as the Southern Indiana Grain & Live Stock Assn. The counties of Pike, Gibson and Knox are involved in the corporation, which is capitalized at \$20,000.

#### WESTERN.

H. F. Lee is building an elevator at Miles City, Mont.

The Cargill Elevator Co. is erecting an elevator at Conrad, Mont.

James Gordon is erecting a grain warehouse at Pine City, Wash.

The Farmers' Union is erecting a warehouse at Bridgeport, Wash.

Balfour, Guthrie & Co. are building elevators at Grangeville, Idaho.

Two steel elevators are being built at the roller mills at Kayesville, Utah.

D. L. Lytle of Dickinson, N. D., is constructing an elevator at Miles City, Mont.

The F. M. Martin Grain & Milling Co. is erecting an elevator at Cheney, Wash.

The Interior Warehouse Co. has added fifty feet to its warehouse at Hooper, Wash.

L. W. Robinson is erecting a 60x200-foot warehouse at Chrisman Siding, Idaho.

The Reubens-Rochdale Co. has leased the Kerr-Gifford warehouse at Reubens, Idaho.

William O'Laughlin is contemplating the erection of an elevator at Twin Bridges, Mont.

The Caldwell Milling & Elevator Co. is erecting a 35,000-bushel elevator at Boise, Idaho.

The Pioneer Grain & Elevator Co. is erecting a 50,000-bushel elevator at Meridian, Idaho.

The Balfour-Guthrie Grain Co. is constructing a 60x200 foot warehouse at Dublin, Idaho.

The Excelsior Milling Co. is erecting a 60,000-bushel elevator at Lawrence Street, Denver.

The North Pacific Mill Co. is erecting several steel grain tanks for wheat at the mills at Prescott, Wash.

The Farmers' Union Warehouse Co. has been organized at Lenore, Idaho, with a capital stock of \$5,000.

A new 30,000-bushel elevator is being erected at Chinook, Mont., by the St. Anthony Elevator Co., of Minneapolis.

Two new elevators are being erected at Wibaux, Mont., one by E. E. Jordan and the other by E. Lloyd of Beach, N. D.

Two large warehouses will be erected on the Nez Perce & Idaho Electric Railroad by Balfour, Guthrie & Co., 60x200 feet.

A. M. Scott and F. S. Ratcliff of Colfax, Wash., have dissolved partnership and will do an independent business in the future.

The Farmers' Union Warehouse Co. of Johnson, Wash., has taken over the Kerr-Gifford warehouse at that place and will operate it.

Interior Warehouse Co. is building an addition to its warehouse at Hooper, Wash. It will be 50 by 100 feet, and will be finished early in September.

Elevators are being erected at Garneill and Winahan, Mont., the former by the Western Grain & Lumber Co., and the latter by the Rocky Mountain Elevator Co.

G. C. and J. R. Losch of West Point, Neb., have purchased the Nils Hoff elevator at Idaho Falls, Idaho, and will conduct the same under the firm name of Losch Bros.

The McCault-Dinsmore Co., of Minneapolis, are investigating the region about Twin Bridges, Mont., with a view to selecting desirable locations for the erection of elevators.

The Russell Milling Co. is erecting a large grain elevator at Billings, Mont., consisting of ten cylindrical concrete banks, fifteen feet in diameter inside and sixty-five feet high.

The Rocky Mountain Elevator Co., which has built elevators at Moccasin and Stanford, Wash., will build five others from Blanchard to Geyser, on the Billings & Northern Line.

Messrs. Scott and son, J. R. Baker and L. S. Miller have severed the partnership that has existed between them under the name, Nampa Mill and Elevator Co., at Boise, Idaho. L. S. Miller takes

over the elevator business, Mr. Baker retires, and Scott & Son have the Nampa roller mills.

The Hawkeye Elevator Co. of Minneapolis is erecting two elevators in the Shield Valley, Mont., one at Clyde Park and another at Meyersburg, to have 60,000 bushels and 35,000 bushels capacity, respectively.

A 50,000-bushel elevator and warehouse is being erected at Limon, Colo., by Russell Gates Mercantile Co., which owns elevators at Calhan and Elbert, Colo. The company is also building an elevator at Elizabeth, Colo.

The F. M. Martin Grain & Milling Co. of Cheney, Wash., which began operations this year, handling 150,000 bushels, is planning to erect an additional warehouse 50 by 100 feet at Calvert, Wash. Its present house is 30 by 100 feet.

The Great Northern grain warehouse at Smith Cone, Wash., has been leased for another year by the importing and exporting firm of Balfour, Guthrie & Co., who expect to handle from 75,000 to 100,000 tons of wheat at this point during the coming year.

A new grain firm, known as the Rathdrum Grain and Supply Co. has purchased the elevator plant of the Farmers' Grain and Supply Co. at Rathdrum, Idaho, for \$5,000. Wm. Neustel is the president of the company, and M. B. Layton is secretary-treasurer.

What is said to be the largest elevator west of Minneapolis is being constructed at Manhattan, Mont., in Gallatin Valley, for the Benepe-Berglund Grain Co., of Bozeman, at a cost of \$30,000. It will have a capacity of 125,000 bushels. It will consist of six main tanks and eight interstitial tanks. An office and sack house will also be built. The entire plant is to be fireproof. A 1,000-foot spur from the Northern Pacific affords shipping facilities.

A modern elevator for handling grain has been completed for the Ritzville Warehouse Co. at Ritzville, Wash., and is now in operation. The structure was erected and furnished with machinery at a cost of \$10,000, and has a capacity for wheat in bulk of 70,000 bushels. It is operated in connection with the company's warehouse for handling grain in the sack, and is so arranged that when the sack department is overrun with grain there is a carrier belt beneath the floor of the warehouse and almost the full length of it, on which the grain will be delivered to the elevator.

Falls City Elevator Co. has been incorporated under the laws of Washington, with a capital stock of \$50,000 and headquarters in Spokane. The incorporators are C. W. Whittaker, W. H. Winfree, and J. V. Rea. The company will take over a number of the elevators of the defunct Farmers' Grain and Supply Company, which was financed by E. W. Swanson, who was also connected with the Spokane & Columbia River Railroad & Navigation Company and the People's bank. Most of the elevators and warehouses erected by the old company were sold at receivers' sale, and were bought in by Mr. Greene. Twelve warehouses and elevators located respectively at Govan, Almira, Davenport, Wilbur, Height, Hatten, Cunningham, Sprague, Thornton and Spangle will be taken over. These were formerly operated on the co-operative plan and many of the stockholders in the new concern were creditors of the old company. The new company will operate the elevators and warehouses the coming fall and winter to handle the trade on the Washington Central and Great Northern lines.

#### SOUTHERN AND SOUTHWESTERN.

Jacques Weil is completing a large corn elevator at Boyce, La.

A new 25,000-bushel elevator at French, N. M., is nearly finished.

R. Estelle will build a milo maize and kaffir corn elevator at Loraine, Texas.

The El Campo Rice Elevator Co., at El Campo, Texas, is installing a drier system.

The Early Grain & Elevator Co. has just completed a large elevator at Amarillo, Tex.

The warehouse of the Visalia, Cal., Milling Co., which recently collapsed, has been rebuilt.

W. F. Reimon & Co. has been incorporated at Charlotte, N. C., with a capital stock of \$25,000.

The Checotah Mill & Elevator Co. of Checotah, Okla., has been incorporated with a capital stock of \$10,000.

The Fayette Coal, Grain & Feed Co. has been organized at Lexington, Ky., with a capital stock of \$10,000.

The Farmers' Gin & Milling Co. of Durant, Okla., is building a 20,000-bushel elevator for corn and cereal business and mill.

The Oklahoma City Board of Trade is planning a large terminal elevator and warehouse on the belt line of the Morris Packing plant.

J. Collin Vincent, late of the firm of Hammond, Snyder & Company, grain receivers and exporters of Baltimore, has entered the receiving and export-



ing business on his own account, with offices in the Chamber of Commerce building.

The A. J. Brunswick Grain Co. has incorporated at St. Joseph, Mo., with a capital stock of \$50,000.

The Lockridge Grain Co. has been incorporated at Lockridge, Okla., with a capitalization of \$7,000.

The American Grain Co. of Shelby county, Tenn., has been incorporated with a capital stock of \$5,000, and will conduct a grain and hay business.

A new firm has bought the mill and 60,000-bushel elevator at Rogana, Tenn. Chenault brothers and Ed. S. Payne of Gallatin are the new owners.

The large grain elevator building on the wharf at Richmond, Va., belonging to the Atlantic Coast Line Railroad Co., is being razed to give place to a warehouse.

The Farmers & Merchants' Grain Co. has been incorporated at Frisco, Texas, with a capital stock of \$12,000, by L. J. Gulledege, J. H. Hill, I. S. Rogers and others.

#### EASTERN.

Edward Materne, of Pocantico Hills, Ill., has bought the James Bird elevator at Tarrytown, N. Y.

The Vile Hay & Grain Co. has been incorporated at Jersey City, N. J., with a capitalization of \$50,000, by E. M. Vile, W. C. Vile and W. H. Wood.

The Westchester Grain Co. building on Willett Avenue, Fort Chester, N. Y., is nearing completion. The foundation is 50x70 feet, and the structure is three stories high.

B. H. Tienken has just erected a three-story plant at Brooklyn, N. Y., measuring 100x25 on the ground, at a cost of \$12,000. He has occupied his old plant on Clay street for thirty-five years.

N. Drake, Inc., has been incorporated at Newark, N. J., at a capitalization of \$10,000, to conduct a hay, grain, straw and feed business. N. Drake, E. A. Drake and N. C. Drake are the incorporators.

The Brooks Grain Co. has been organized at Brooks, Maine, for carrying on a grain and feed business. The capital stock is \$10,000. William B. Swan is president; Edward Sibley, treasurer. Both officials named are of Belfast.

#### THE DAKOTAS.

A new elevator is being erected at McHenry, N. D. A new elevator is being built at Wahpeton, N. D. An elevator is being erected at Sandynook, N. D. The elevator at Brookings, S. D., is being rebuilt. A new farmers' elevator is planned for Ray, N. D. Ewmeinhart is erecting an elevator at Balfour, S. D.

The farmers are building an elevator at Greene, N. D.

Lee & Prentiss are building an elevator at Riverside, N. D.

The Durisch Elevator at Highmore, S. D., is nearly completed.

A new farmers' elevator is to be built at Cleveland, N. D.

The Van Dusen Co. is building an elevator at Philip, S. D.

An addition is being built to the elevator at Labalt, S. D.

C. F. Dunn is erecting a 30,000-bushel elevator at Farmer, S. D.

The Van Dusen Co. has completed an elevator at Owanka, S. D.

The Cargill-Robb elevator at Anamoose, N. D., is being enlarged.

A. C. Crass has purchased the Traux Elevator at Montrose, S. D.

Anton Jacobson has purchased the old elevator at Crosby, N. D.

A farmers' elevator company has been organized at Lennox, S. D.

The Donahue Grain Co. has purchased an elevator at Chester, S. D.

Henry Brothers have leased the reliance elevator at Madison, S. D.

Henry Brothers have leased the Reliance elevator at Chester, S. D.

The Mayville, N. D., farmers have leased the Imperial Elevator.

The Farmers' Elevator Co. has been organized at Pleasant Lake, N. D.

The Cedar Rapids Grain Co. has rented the elevator at Colton, S. D.

The Rolla, N. D., farmers have organized a farmers' elevator company.

E. W. Meinhardt is building a 30,000-bushel elevator at Balfour, N. D.

An addition is being built to the farmers' elevator at La Bott, S. D.

The Farmers' Elevator Co., of Griffin, N. D., has been incorporated with a capital stock of \$5,000,

and will commence the erection of a 20,000-bushel elevator at once.

J. J. Mullaney has bought the Linkenfelter Elevator at Spencer, S. D.

The Atlas Elevator Co. is erecting a 30,000-bushel elevator at Onida, S. D.

The Atlas Elevator Co. is erecting a 30,000-bushel elevator at Pierre, S. D.

W. E. Byerly has sold his elevator at Velva, N. D., to Gilbertson Bros.

The Hunting Elevator Co., Canton, S. D., is remodeling their elevator.

The Atlas Elevator Co. is building a 30,000-bushel elevator at Houghton, S. D.

The M. King Elevator Co. is erecting elevators at Vivian and Kennebec, S. D.

The farmers around Berthold, N. D., have organized and will build an elevator.

The St. Anthony Elevator Co. is erecting a 50,000-bushel elevator at Buford, N. D.

The farmers around Columbus, N. D., have purchased one of the line elevators.

The Woodworth, N. D., elevator, recently destroyed by fire, has been rebuilt.

Arnold Bros. of Berwick, N. D., have bought the farmers' elevator at Stanley, N. D.

The St. Anthony Elevator Co. has bought the Hennepin line of elevators in N. D.

Another elevator is being built at Draper, S. D., by Schoeneman Bros. of Sioux Falls.

John Desilets has purchased the grain elevator at Deering, N. D., from F. Jestrab & Co.

The Kroft Elevator, at Groton, N. D., has been sold to J. E. Townsend and J. F. Meyer.

A new 25,000-bushel elevator is being erected at New Salem, S. D., by A. F. Dietz & Sons.

The Farmers' Elevator Co. has been organized at Adams, N. D., with a capital of \$50,000.

W. A. Caldwell of Monango, N. D., has purchased the Atlantic Elevator at Merricourt, N. D.

The Ashton, S. D., Elevator Co., has increased the capacity of its house to 40,000 bushels.

The Farmers' Elevator Co., at Seneca, S. D., has let the contract for a 30,000-bushel elevator.

The Farmers' Elevator Co., of Hamer, S. D., has been incorporated at \$10,000 capitalization.

The Eli Salyards Grain Co. of Duluth, Minn., have opened their elevator at Minto, N. D.

M. Donovan, of Osnabrook, N. D., has purchased the Plymouth Elevator at Medford, N. D.

The Farmers' Elevator Co. has been organized at Jud, N. D., with a capital stock of \$10,000.

The Farmers' Elevator Co. has been organized at Kintyre, N. D., with a capital stock of \$7,000.

The Powers Elevator Co. of Minneapolis has purchased E. C. Swan's elevator at Britton, S. D.

A new elevator is being built on the Milwaukee right of way in Edgeley, N. D., by local capital.

F. E. Van Zee and P. J. Van Hemert of Platt, S. D., are erecting an elevator at Okaton, S. D.

The Victoria Elevator Co. of Minneapolis is building elevators at Fessenden and Anamoose, N. D.

The Blaisdell Farmers' Co., Blaisdell, N. D., has been incorporated with a capital stock of \$10,000.

The Regan & Lyness Elevator Co. of Fessenden, N. D., are erecting an elevator at Chaseley, N. D.

Elevators are being erected at Sikla, a new town between Selby and Glenham, in Walworth county, S. D.

Avary & Kjelmeyer have purchased the Traux Grain Co. elevator and grain business at Mitchell, S. D.

George Kusler of Artas, and Reagan & Cooper of Eureka, S. D., are building an elevator at Barbara, S. D.

The Riverside Farmers' Elevator Co. have changed their headquarters from Kramer, N. D. to Newberg, N. D.

The Columbia Elevator Co., of Minneapolis, Minn., is erecting a 40,000-bushel elevator at Hettinger, N. D.

Karl Klausner of Minneapolis has bought the Burgess Elevator at Sherwood, N. D., and is managing it.

The Farmers' Equity Elevator Co. has purchased the Osborn-McMillan Elevator at Ryder, N. D. for \$4,500.

The Equity Grain and Mercantile Co. has been organized at Driscoll, N. D. The capital stock is \$10,000.

The Buttzville Farmers' Elevator Co. has been organized at Buttzville, N. D., with a capital stock of \$10,000.

The Farmers' Co-operative Elevator & Trading Co. has been organized at Ambrose, N. D. C. W. Marsland is president and W. M. Drennen secretary.

The Homestead Elevator will be taken over at \$6,500.

D. S. Lytle of Dickinson, N. D., has sold his elevator at Beach, N. D., to his brother, A. H. Lytle.

The Farmers' Elevator Co. has purchased the National Elevator Co.'s elevator at Rolla, N. D., for \$4,800.

J. L. Reedy of Beresford, S. D., has sold his elevator at Wakonda, S. D., to J. B. Kuhler and T. H. Diefendorff.

R. S. Dawley and A. A. Kleinart of Antler, N. D., operating as the Dawley Elevator Co., have dissolved partnership.

Andrew Mears has purchased the Northwestern Elevator at Bancroft, S. D., and will embark in the grain business.

The Mouse River Co-operative Elevator Co. of Grand, N. D., has been incorporated with a capital stock of \$10,000.

The Mouse River Farmers' Co-operative Elevator Co. has been organized at Grano, N. D. The capital stock is \$10,000.

The Havana Elevator Co. has been organized at Forman, N. D., which has bought the Cargill elevator at that place.

The Charles Mix County Farmers' Co-Operative Co., of Platte, S. D., have installed a Hall Signaling Grain Distributor.

Selmsier & McBeth are constructing a 30,000-bushel elevator at Adelaide, S. D., a new station on the M. & St. L. Ry.

Four new steel granaries are being built at Big Stone, S. D., for Gold & Co., to be used for the storage of seed grain.

The Grafton, N. D., Roller Mills are enlarging their elevators to provide for the storage of 50,000 more bushels of grain.

A movement is on foot to form a farmers' co-operative company and take over the Reliance elevator at Webster, S. D.

W. E. Dickinson, of Fullerton, N. D., has purchased a feed mill which he operates in connection with his grain business.

The F. J. Mead elevator at Flandreau, S. D., was sold at auction to Mel Davis for \$5,800. Mr. Davis will operate the elevator.

W. H. Mensing, of Kulm, N. D., has bought an interest in an elevator at Ashley, N. D., and will take up his residence there.

Torrence Bros. of Burke, N. D., have sold their elevator to Glynn Bros. of Tabor, N. D. Wm. Glynn will manage the house.

The Western Lumber & Elevator Co. with headquarters at Bowman, N. D., are building a 30,000-bushel elevator at Ives, N. D.

Peter Haehn has taken possession of the Rex Elevator at Casselton, N. D., and has opened up in the grain, coal and wood trade.

The Farmers' Grain & Fuel Co. has been organized at Nekoma, N. D.; capital stock \$10,000. R. C. McMurray was elected president.

The Security Elevator Co. of Minneapolis, Minn., is constructing an elevator at Mahon, S. D. It will have a capacity of 20,000 bushels.

Gardner & Dibble are handling grain at New England, N. D. The Milwaukee Road will be ready to haul from that point by Dec. 1.

A farmers' elevator company has been organized at Hong, N. D., with a capital of \$20,000, which has purchased the National elevator at that place.

Marion Edwards has sold his elevator to the farmers at Rolette, N. D. The farmers company has been incorporated with a capital of \$15,000.

The Freeman-Bair Co. has commenced to buy grain at Aberdeen, S. D., from their new plant just completed in place of the one recently destroyed by fire.

Ten elevators will receive grain this fall at Graton, S. D., this season. The Merchants' Elevator Co., a new company, has bought the Empire Elevator.

The farmers around Williston, N. D., have organized the Farmers' Co-operative Elevator & Trading Co., and have let the contract for a 25,000-bushel elevator.

W. J. Thompson has traded his elevator at Ramona, S. D., to Peter Hampton for land. Two other elevators owned by Thompson were involved in the deal.

Thompson & Mitchell, of Whitewood, S. D., have bought a half interest in the elevator at that place of J. C. Headlee. The other half interest is owned by James Quillian.

The Victoria Elevator Co., of Minneapolis, has awarded the contracts for its two new elevators at Anamoose and Fessenden, N. D., to Moulton & Evans, of Minneapolis.

The McKenzie County Shippers' Association has been organized at Carlson, N. D. C. Sax, of Banks, was elected president, and O. E. Ronning, of Carlson, secretary. The object of the organization is



the transportation of grain by boat, and bringing supplies into the county on return trips.

The Farmers' Elevator Co. of Arvilla, N. D., has been organized with a capital stock of \$10,000 and has rented the Minneapolis & Northern elevator.

The R. A. Grams elevator at Bowbells, N. D., is being moved to the site made vacant by the destruction of the Royal Elevator by fire some months ago.

The South Dakota Farmers' Elevator Co. of Verdon, S. D., has purchased W. A. McCaughy's elevator at Brentwood, S. D. for \$6,000. The elevator has a capacity of 30,000 bushels.

A farmers' elevator is to be erected at Taylor, N. D., at a cost of \$7,500, and having a capacity of 45,000 bushels. The farmers company has been incorporated with a capital stock of \$10,000.

The Columbia Elevator Co. of Minneapolis is erecting three new elevators in Hettinger Co., each to have a capacity of 40,000 bushels, with a store room holding 60,000 bushels, including one at Mott.

#### MISSOURI, KANSAS AND NEBRASKA.

A 25,000-bushel elevator is being erected at Burlingame, Kan.

J. Rowen is building a large grain elevator at Alliance, Neb.

Hutt & Williams are erecting a \$5,000 elevator at Highland, Kan.

W. W. Culver has installed the new Hall system at Kingman, Kan.

The Ford Elevator & Supply Co. at Ford, Kan., has been completed.

The Caldwell Milling Co. has purchased an elevator at Perth, Kan.

New cement grain tanks are being constructed by the Kramer, Kan., mills.

The Iowa Nebraska Grain Co. has enlarged its elevator at Minden, Neb.

The Appleman Grain Co. is the name of a new grain company at Salina, Kan.

T. B. Hord Grain Co. have bought two Hall Distributors, to be used at Duncan, Neb.

W. S. Jackson & Co. have purchased the Home Grain Co.'s elevator at Lebanon, Kan.

The Gooch Milling & Elevator Co., of Lincoln, Neb., is building a 100,000-bushel elevator.

P. H. Pelkey Construction Co. has installed the new Hall system at Milford, Sitka and Boyd, Kan.

The Lindsborg Milling & Elevator Co. has purchased the Thorstenberg Grain Co. elevator at Claffin, Kan.

C. S. Edwards has equipped his elevator at Jewell City, Kan., with an improved Hall Signaling Grain Distributor.

E. H. Cramer is equipping an elevator at Marquette, Neb., with an improved Hall Signaling Grain Distributor.

A farmers' elevator company has been organized at Pool, Buffalo County, Neb., with subscriptions amounting to \$10,000.

A. H. Brooks & Son have ordered machinery for a 25,000-bushel elevator at Sargent, Neb. This is the third elevator at Sargent.

L. E. Furry has sold the grain elevator at Franklin, Neb., which he recently purchased from William Clapp to S. E. Pecht, for \$2,800.

Will and Wesley Blair will expend \$14,000 in remodeling the old Baker Elevator at Atchison, Kan., which they recently purchased.

The Hardtner Elevator Co. has been organized by wheat growers in the vicinity of the Kiowa-Hardtner railroad, Kan. The company will build an elevator at Hardtner.

The new Farmers' Elevator Co., at Marquette, Neb., has secured the present site of the depot for its elevator. The depot is to be moved a distance north from its present location.

Charles H. Redmon of Overbrook, Kan., has sold his stock in the Overbrook Elevator Co., and retires from the active management. He is succeeded by Wm. Holbert, who also is a stockholder.

The Moses Brothers Mill & Elevator Co. has been incorporated at Great Bend, Kan., with a paid-up capitalization of \$200,000. C. L. Moses is president; E. W. Moses, first vice-president; Will Moses, second vice-president; Col. Cash Moses, secretary and treasurer. Col. Moses will have charge of the flour department, and J. J. Hiddleston will manage the grain business.

#### CANADIAN.

Leslie & Wilson are building an elevator at Elstow, Sask.

The Chalmers Elevator at Mantow, Man., has been rebuilt.

H. E. Meiback is erecting an elevator at Monarch, Alta.

The Harbor Board at Montreal has recommended the erection by the Government of an \$1,800,000 grain elevator to meet the demands of the export

trade, which is now twelve times its volume of two years ago.

J. R. Spear is building a 25,000-bushel elevator at Pippin, Man.

The National Elevator Co. is erecting a house at Fort William.

Leitch Bros. of Oak River are building an elevator at Balcarres, Man.

An elevator is being erected at Namaka, in the Bow Valley, Alberta.

The Imperial Elevator Co., Ltd., has completed its elevator at Carstairs.

The Farmers' Elevator Co., Ltd., has been organized at Killam, Sask.

The Goose Lake Grain & Elevator Co. is erecting an elevator at Harris, Sask.

The Dow & Murray Cereal Co. are building an elevator at Strathclair, Man.

The Norris Elevator Co., of Winnipeg, is erecting an elevator at Monarch, Alta.

A. McMichael, Jr., at Melfort, Sask., is enlarging his elevator to 45,000 bushels.

The Western Elevator Co. is building an addition to its elevator at Rothwell, Man.

The Farmers' Elevator Co. at Melfort, Sask., is erecting a 60,000-bushel elevator.

A second elevator is being built at Chamberlain, fifty miles north of Regina, Sask.

Paulson & Winkler contemplate building a 25,000-bushel elevator at Loreburn, Sask.

The capacity of the elevator at Kamsack, Sask., has been increased to 90,000 bushels.

The McClory Manufacturing Co. of Saskatoon, Sask., have completed its warehouses.

The National Grain Co. has bought the elevator at Cagley, Alta., of the Nanton Elevator Co.

The Young Grain Co. will rebuild at Dunrea, Alta., the elevator that burned down last August.

The Postum Cereal Co. of Battle Creek, Mich., is erecting two grain tanks at Windsor, Ont.

The Dominion Elevator Co. is erecting an elevator at the third siding west of Shellmouth, Man.

The Standard Elevator Co. has been incorporated at Winnipeg, with a capitalization of \$250,000.

The Atlas Elevator Co., Ltd., has been licensed to carry on a business in Manitoba and Saskatchewan.

The Gillespie Elevator Co. of Edmonton, Alta., is erecting a 30,000-bushel elevator at Bruderheim, Alta.

Claude Terwilliger of Sioux City, Iowa, has purchased the elevators at Granium and Staneley, Alberta.

The Thunder Bay Elevator Co., Ltd., has increased the number of its directors from three to seven.

The authorized capital of the Claresholm Lumber & Grain Co. at Claresholm, Alta., has been increased to \$100,000.

Alex McFee & Co., Ltd., Montreal, has been incorporated to do a grain business, with a capital stock of \$149,000.

The J. W. Tackaberry Produce and Provision Co. of Merlin, Ont., is adding 100 feet to its 25,000 bushel elevator.

The Theo. Meyers elevator, under construction at Fillmore, Sask., has been taken over by the Fillmore Farmers' Co.

The Ogilvie Flour Mills Co. now owns 116 country elevators in the Canadian Northwest, 16 of which have been erected this season.

E. A. Schmidt & Co., Ltd., has been incorporated at Montreal, with a capital stock of \$20,000, to manufacture and deal in grain, flour and meal.

The Western Canada Flour Mills Co. purchased the H. Rogers elevator at McGregor, Man., and the elevators at Edans, Lavenham and Austin.

A grain elevator company has been organized at New Westminster, Toronto, with a capital stock of \$500,000, to build warehouses and buy grain direct from the farmers.

Randall, Gee & Mitchell, Ltd., has been incorporated at Winnipeg, with a capital stock of \$25,000, to carry on an elevator and warehouse business, and own and operate vessels.

The Alberta Pacific Elevator Co. has erected ten elevators this year and secured in addition twenty-five new elevator sites. The storage capacity has been increased 1,250,000 over that of last year.

The Nicholas Bawlf interests in the Northern Elevator Co. have been transferred to E. C. Warner of Minneapolis, president of the Midland Oil Mills. Mr. Bawlf will henceforth be identified with the Alberta Elevator Co. with his son, W. R. Bawlf.

At a recent meeting of the stockholders of the Carlyle Farmers' Elevator Co., at Carlyle, Sask., it was voted by a majority of six to place their proposed elevator on the C. N. R. instead of on

the C. P. R., as already decided by the directors. As a consequence of being overruled, the directors and president resigned.

The Grain Growers' Grain Co. of High River, Alta., handled over 7,000,000 bushels of grain the past year, and from a one cent a bushel commission gave to its stockholders a 44 per cent dividend.

The Hartney Grain Co., Ltd., has been organized at Hartney, Man., with a capital stock of \$6,000, and will build elevators, warehouses, chopping mills, etc. David McCullough, J. M. Fee, and others are the incorporators.

The Brackman-Ker Milling Co. has transferred all its elevators in Alberta, with the exception of the storage plants at Edmonton and Strathcona, to the Alberta Grain Co. The elevators transferred are located at Wesaskiwin, Leduc, Hobbema, Ellerslie, Stony Plain, St. Albert, Bittern Lake, Fort Saskatchewan and Lamont.

#### GRAIN CLEARING HOUSE AT FORT WILLIAM.

A meeting of the Dominion Marine Association was held at Toronto on August 19, when the establishment of a grain clearing house at Fort William-Port Arthur was discussed. The purpose of the Lake Carriers' Clearing House Association is to arrange for the loading of vessels at Fort William and Port Arthur, from one or two elevators, instead of at a greater number as at present, thus obviating the delay which now takes place. Those present indorsed the proposed arrangement, and undertook to bear their proportion of the expense in maintaining such a clearing house, says the Railway and Marine World.

The expense of maintaining this system will be considerable, as there is to be an accounting staff at Winnipeg, as well as an office at Fort William or Port Arthur, where the loads will be adjusted. The charges which have proved acceptable to the shippers are as follows: For a load taken at one house only, 30c. per 1,000 bu.; for a load taken at two houses, 20c. per 1,000 bu.; for a load taken at three or more houses, 10c. per 1,000 bu.

This, it is anticipated, will pay a large proportion of the expense. Under the scheme, shippers at Winnipeg will turn over their railway bills of lading with orders attached, and the clearing house at the shipping port will take them, and all others that may have come in, and rearrange the shipments, with a view to lessening the number of houses at which any vessel will have to call.

For example, five shippers may be sending five vessels to five houses each, and the clearing house may be able to so adjust the shipments that each of the vessels may be able to get her full load at one, two, or at most, three houses. Under the schedule of charges mentioned, the vessel will be under less expense, according as her shipments entail more time and trouble in loading. The matter is now well in hand, and seeing that vessel owners have undertaken a large share of the expense, the scheme should be put on a good working basis very shortly. The Bankers' Association and the owners of the terminal facilities have agreed to the scheme. In carrying out the work, the terminal operators will recognize orders from the clearing house, the shipper having no direct relations with them. An important feature of the scheme is that all shipments will be on this basis, the vessel fee will be collected in cash, and consequently every vessel will be subject to the arrangement, United States vessels as well as Canadian. It is understood that the United States owners have expressed their concurrence with the arrangements made. The owners of terminal elevators have taken out insurance policies to provide against collapse, and this enables shippers to escape risk of loss in allowing the shuffling of their grain shipments or orders, as other risks are covered.

At the same meeting it was unanimously resolved to ask that the system of weighing into vessels at these ports under government supervision be abolished on the ground that it is not only useless but embarrassing. Hitherto, the Association has asked that the system be extended to the lower ports, and that the government guarantee the outturns, but this is not considered to be feasible, so it now seeks to have the whole system abolished.

Common vetch is a great nitrogen gatherer, and is used ordinarily in the East as a catch crop or cover crop in orchards. In Oregon, however, it has become a standard stock feed and is used as hay, silage, pasture and soiling crop. Vetch makes a very palatable hay and dairy cattle prefer vetch silage to red clover silage, while on some farms it is grown as a substitute for clover as a rotation crop. It is sown usually in the fall with wheat or rye to support the stalks, and is cut for hay when the seeds begin to form in the pods, yielding in Oregon from two to four tons of hay and fifteen to thirty bushels of seed to the acre.



## THE EXCHANGES

Omaha Grain Exchange quotations will hereafter be regularly distributed by the Associated Press.

It was noted as a remarkable fact that on August 14 there was no trading in corn in the New York Produce Exchange.

The membership of the Boston Chamber of Commerce, which includes all lines of business, has reached nearly 2,900.

The registration of elevator receipts has been transferred from the Minneapolis Chamber of Commerce to a state registrar.

The bucket-shops of St. Louis have been detected stealing quotations from the big blackboard of the Merchants' Exchange by means of field glasses; but the police permit the shops to run as usual.

The Rogers Elevator (Langenberg Bros. & Co.) has been declared irregular at St. Louis, provided, however, that receipts issued prior to August 10, 1909, are regular under the Merchants' Exchange rule for six months.

The clearing house committee of the Duluth Board of Trade has decided to abolish the charge of 50c per thousand dollars exchange heretofore paid on grain drafts reaching the receivers from interior towns of the Dakotas.

The Oklahoma City Board of Trade has elected D. C. Kolp, Buran House, C. V. Topping, P. J. Mullen, and R. H. Drennan directors. The directors have elected Buran House president, R. H. Drennan vice-president, and Major Moberly secretary. The Board contemplates the erection of a large elevator at Oklahoma City.

The Norfolk Board of Trade has sent a committee to visit the London Corn Exchange in the interest of the city's export grain trade. The committee consists of Merritt T. Cooke, president of the Board, and J. H. Cofer, grain exporter. Some years ago the English buyers "cut out" Norfolk and have not since patronized that port, whose exporters think without cause.

B. W. Wasson, first vice-president of the Cincinnati Chamber of Commerce, having reached his eightieth birthday on August 26, the board of directors honored the occasion by electing him an Honorary member. Mr. Wasson has been engaged in the grain trade at Cincinnati for forty-five years, and has long been one of the most helpful members of the Chamber.

The directors of the Wichita Board of Trade on August 20 applied to the state grain inspector for a more liberal inspection of the grain shipped to the Wichita market. The wheat shipped there is sold on a basis of No. 2 grade, and it is claimed the grades are better in Wichita than at Kansas City; and they desire that the grades be made uniform for both markets.

The grain committee of the Boston Chamber of Commerce appointed on August 20, consists of Geo. O. Proctor, chairman, Rodney T. Hardy and Chas. F. Marden. This committee has full charge of the grain inspection and provides the standard samples of the established grades. Boston distributes grain and feed throughout New England, and while considerable of the grain and feed sold does not actually go into the city, being diverted at Rotterdam and Mechanicsville, inspection is made there by Chamber of Commerce employes.

The row in St. Paul has resulted in a suit filed in the Ramsey County District Court by several members of the St. Paul Board of Trade, to restrain the officers of the Board from suspending them for non-payment of dues. They claim that assessments are levied for purposes that benefit only some of the subsidiary concerns, as the Produce Exchange and the Hay and Grain Exchange, and they seek to have the assessments declared void. The restraining order was issued by Judge O. B. Lewis on August 27, and a hearing was granted the two parties to the suit in the District Court at a later date.

### CALGARY GRAIN EXCHANGE.

The Calgary Grain Exchange has formally organized with 71 members, and the following officers: L. P. Strong, president; W. Carson, vice-president; A. B. Campbell, treasurer; C. W. Rowland, secretary pro tem.

A committee has been appointed to secure a trading room and to provide for telegraph service.

### CHANGES OF RULES AT MILWAUKEE.

The Milwaukee Chamber of Commerce on September 2 adopted amendments to the rules providing:

(1) That the current rate of interest on advances be charged; the old rule requiring a minimum charge of 6 per cent.

(2) For the establishment of a new grade of barley to be called "Medium" barley, and making this grade deliverable on future contracts instead of the grade of "Standard" barley. The requirements of the new grade are that it shall be a me-

dium grade of malting barley, testing not less than 45 lbs. to the measured bushel, reasonably clean, discolored and reasonably sound.

### NEW EXCHANGE AT LINCOLN.

The grain men at Lincoln, Nebr., have organized the Lincoln Grain Exchange, with capital of \$25,000. The charter members are Elliott Lowe, J. S. Ewart, E. D. Foster and F. E. Roth.

Lincoln has five elevators, to-wit: those of the Gooch Milling Co. (125,000 bus.), Central Granaries (250,000 bus.), H. O. Barber (50,000 bus.), A. O. Foster (100,000 bus.), and Updike Milling Co. (150,000 bus.).

A grain exchange along similar lines was organized in Lincoln five years ago but its articles of incorporation were never filed and the organization came to nothing. The new exchange will endeavor to secure all the members possible and will then elect a board of directors and officers and secure temporary quarters in the Fraternity Building.

### EXCHANGE CONFERENCE AT CHICAGO.

By invitation of the directors of the Chicago Board of Trade, representatives of all grain exchanges in the United States and Canada, grain merchants, millers, dealers and brokers, will meet at Chicago on September 17 and 18 to discuss matters of general interest and to formulate a uniform policy with reference to the larger operations of the exchanges, and to extend their influence.

The program for the occasion will be as follows: Friday, September 17, 10 a. m.—Informal meeting on 'change.

3 p. m.—Business meeting at Princess Theater. The following subjects will be discussed: 1. The importance of maintaining by all exchanges a high standard of business methods and integrity on the part of its members. 2. Harmony and co-operation among grain exchanges in all questions pertaining to the best interests of the grain trade. (a) Suggestions as to the best methods to insure same. (b) Benefits to be derived from annual meetings of exchanges. 3. Inspection of grain. (a) Value of uniform rules for grading grain in all markets. (b) Should Federal inspection be encouraged? 4. Should margins be required as security on purchases and sales of cash grain for future delivery; and if so, should the exchanges co-operate in framing rules to that end. 5. Discussion of miscellaneous subjects.

6:30 p. m.—Banquet at the new LaSalle Hotel. Saturday, Sept. 18.—10 a. m.—Informal meeting on 'change.

1:30 p. m.—Automobile trip through Chicago's park system, arriving at Bismarck Garden at 6 p. m.

8:30 p. m.—American Music Hall. Special programme.

All the exchanges have appointed delegates to this meeting. Several of the cities will send large delegations, St. Louis, for example, preparing to send a special train of members of the Merchants' Exchange. The representatives from the various cities will be taken care of by special committees on their arrival, in order to facilitate introduction and general acquaintance. The following are the chairmen of these special reception committees:

Minneapolis, W. H. Lake; Petersburg and Norfolk, E. L. Glaser; Atlanta and New Orleans, E. F. Leland; Quebec, E. A. Beauvais; Seattle, J. P. McLaughlin; San Francisco, J. F. L. Curtis; Nashville and Memphis, F. H. Paddleford; Los Angeles, T. E. Cunningham; Galveston, James Norris; Buffalo, S. W. Yantis; Toronto, Finley Barrell; New York, Walter Bevan; Boston, David A. Noyes; Milwaukee, A. V. Booth; Duluth, Fred W. Maynard; Omaha, Samuel P. Arnold; St. Louis, James E. Bennett; Spokane, Portland, Leavenworth, Atchison, Wichita, Fort Worth, R. W. McKinnon; foreign exchanges, E. W. Kalb; Savannah, F. P. Blakeman; Cleveland, E. L. Merritt; St. Joseph, W. H. Curran; Sioux City, Warren Lamson; Richmond, W. L. Gregson; Montreal, E. A. Beauvais; Louisville, F. I. Blakeman; Pittsburgh, T. E. Cunningham; Denver, W. S. Crosby; Peoria, W. N. Eckhardt; Detroit, Howard Jackson; Winnipeg, Robert McDougal; Philadelphia, R. Gambrell; Baltimore, Daniel Murphy; Kansas City, Charles B. Pierce; Toledo, Howard Jackson; Cincinnati, W. H. Colvin.

### CHANGES IN EXCHANGE MEMBERSHIP.

Chicago.—Sec'y Geo. F. Stone reports the following members of the Chicago Board of Trade admitted during August: Edward DeWitt Shumway, Theo. Speltz, Amandus Fahlenkamp; and the following memberships transferred: Fred S. Osborne, Wm. Douglas, F. O. Ballard.

Detroit.—Sec'y F. W. Waring reports that H. J. Hasley of Milan, Mich., has been admitted to membership in the Detroit Board of Trade.

Duluth.—Sec'y Chas. F. MacDonald reports the following members admitted to the Duluth Board of Trade during July and August: Henry F. Arnes, A. G. Tanton, E. A. Vivian, T. H. Hagen, C. H. Gordon, Carlisle Hastings, Wm. B. Banks, Jr., of Duluth, and F. M. Davies of Minneapolis; and the following members withdrawn: P. B. Getchell, C. H.

Gordon, W. O. Timmerman and F. P. Sheldon of Minneapolis, A. H. W. Eckstein and L. E. Meyer of Duluth.

Memphis.—Sec'y N. S. Grover reports that P. A. Patrick of P. A. Patrick & Co. has been admitted to membership in the Memphis Merchants' Exchange.

Milwaukee.—Sec'y H. P. Plumb reports the following members admitted to the Milwaukee Chamber of Commerce during August: Hubert Karl, Jr., Herman Schultz, John A. Kennedy, Chas. A. Johnson, Stephen A. Patton, Wm. F. Filter; and the following withdrawals: L. Landauer, Jas. Q. Glavin, Frank J. Seidel; and the following membership transfers because of death: M. E. Milmoie, Bernhard Stein, John P. Murphy.

Minneapolis.—Ass't Sec'y E. S. Hughes reports the following new members of the Minneapolis Chamber of Commerce admitted to September 10, 1909: Benj. C. Crangle, 511 Chamber of Commerce; C. S. Sheffield, 151 Chamber of Commerce; John H. Ball; John V. McCarthy; M. W. Smith, Corn Exchange; F. M. Norton, 81 Chamber of Commerce; L. W. Gifford, 77 Chamber of Commerce; A. S. Boulton, Security Bank Bldg.; Wm. P. Tuttle, 412 Chamber of Commerce; Herbert L. Wilk, 602 Chamber of Commerce, all of Minneapolis; and the following withdrawals to date, September 10: Geo. H. Daggett, A. W. Strong, M. T. Rohrer and Loren Fletcher.

Montreal.—Asst. Sec'y J. Stanley Cook reports the death on August 30 of W. A. Gandle, assistant-secretary of the Ogilvie Flour Mills Co., and a member of the Montreal Board of Trade. Mr. Gandle was a very bright young man, with a promising future, and his death was greatly regretted by his fellow-members and particularly so by the officials of the Ogilvie Company.

Omaha.—Sec'y F. P. Manchester reports the following members admitted to the Omaha Grain Exchange during August: E. R. Beem, J. F. Westrand, R. S. Kerr, Frank Taylor; and the following withdrawals: E. G. Hudnall, J. A. Ellis.

Philadelphia.—Sec'y Frank E. Marshall reports the election to membership in the Commercial Exchange on September 2 of Richardson Brothers, brokers (William M. and Edward M. Richardson), 434 Bourse, who are already members individually, of long standing; and F. de Sales Dundas, flour broker, 811 Perry Building.

St. Louis.—Sec'y Geo. H. Morgan reports the following members admitted in August to membership in the St. Louis Merchants' Exchange: James Gillis, Gillis Bros., 202 North Main Street; W. D. Judd, Chamber of Commerce; John H. Lloyd, C. O. Metheny & Co., Springfield, Ill.; E. W. Wagner, 99 Board of Trade, Chicago; and the following withdrawals of members that have been in the grain trade: W. L. Green, Jr., and Robert Ruxton.

Toledo.—Sec'y Archibald Gassaway reports the admission to membership in the Toledo Produce Exchange of R. L. Starkweather, representing the Lippe Grain Co.

### GRAIN ELEVATORS IN INDIA.

I am tempted to mention again that the question of employing elevators in India is still in a fluid stage, says the Calcutta correspondent of Broomball's Corn Trade News. It was through the persistent efforts of that indefatigable officer—the Director-General of Commercial Intelligence (Mr. Frederick Noël-Paton)—that a committee was appointed last spring to enquire into the desirability of erecting elevators, but it does not seem to have made much headway. The big exports of wheat done this year at Calcutta—even more than Kurachee of Bombay—point to the need for increased expedition in shipment. The introduction of the elevators will enable one berth in a dock to load several ships in the time undertaken to handle one. It would be a great gain in a cramped place like Calcutta. The new terms of contract for wheat for Europe should remove the principal objections to shipping from elevators. In recent years there has been little wheat export business on this side of India, but this year's experience has shown that we should not allow this important subject to be shelved longer.

The system of erecting up-country elevators holds promise of being a less costly and more fruitful expedient than that at present in force. It is held that it would spread the traffic over a large part of the year, while at the same time preserving the wheat. The author of a pamphlet on the subject argues that a large portion of the export wheat will probably not be warehoused up-country, but will come into first sight in the railway statistics as at present. The only difference will be that when the exporters have bought and despatched all the wheat that the market wants at the moment and the railways are able to carry within a short time, they will not stop buying and send the residue of their stocks to unprotected railway goods yards and to warehouses infested by weevil, but will continue their operations in the confidence that their holdings will not deteriorate. The introduction of elevators would mean the saving of a large proportion of the wheat now damaged by rain which brings heavy losses to holders.



## COMMISSION

The Pendleton Grain Co. of St. Louis has been chartered; authorized capital stock, \$35,000 to \$40,000.

The Lushman Hay and Grain Co. has been incorporated at St. Louis, with authorized capital stock of \$10,000 to \$50,000.

The Seagrove-Katz Grain Co., offices 525 Pierce Building, St. Louis, has recently been organized with a capital stock of \$30,000.

The Galvin Grain Co. of Milwaukee, with capital of \$40,000, has been incorporated by Charles F. Galvin, Merton H. Potter and Ferdinand A. Geiger.

The A. J. Braunschwig Grain Co. of St. Joseph, Mo., has been incorporated by A. J. Braunschwig, Chas. E. Jesup and C. A. Clark; authorized capital, \$50,000.

A. W. Borden & Co., brokers in hay, grain, seeds, etc., have removed from New Vienna, O., to Greenfield, where they will continue in business as at New Vienna.

H. F. Probst of Arkansas City, Kan., has become a member of the Wichita Board of Trade, and will remove to that city, where he will operate as the H. F. Probst Grain and Commission Co.

The American Grain Co., Memphis, Tenn., has applied for incorporation privileges. The capital stock named is \$5,000; and the incorporators are J. E. Keck, J. B. Lento, B. A. Laughlin, A. D. Gibson and F. L. Maddox.

The Atlantic Elevator Co. of Minneapolis has filed articles of incorporation increasing its capital stock from \$300,000 to an authorized issue of \$1,000,000. The officers are George Bagley, president; G. L. Start, secretary, and Charles M. Case, treasurer.

The Harris Grain Co. of Minneapolis, has amended its articles of incorporation to permit it to deal in all kinds of grain, seeds and produce and to hold, buy or lease elevators and warehouses. The name also will be changed to the Golden Valley Independent Grain Company.

On September 11 Ware & Leland, Chicago, received what is said to be the largest car of corn ever received in the Chicago market if not any market in the world. It contained 137,010 pounds or 2,446 bushels and 34 pounds. It was shipped from Iowa on the Illinois Central and unloaded at the Keystone Elevator.

F. E. Winans & Co., grain and field seed merchants of No. 6 Sherman Street, Chicago, handled the first full carload of new timothy seed on the Chicago market. It arrived from southern Iowa and was good color and quality. Mr. Winans reports the movement of seeds somewhat later than last year.

S. R. Overton has opened offices in the Board of Trade Building, Wichita, under the name of The S. R. Overton Grain Co. His sons, Marvin, eighteen years, and Basil, sixteen years of age, are members of the firm. Mr. Overton was telegraph operator and agent at Hennessey at the time of the opening of Oklahoma.

R. H. Thornborn, who two years ago abandoned the Chicago Board of Trade in broken health and blind from cataract of the eyes, reappeared on 'change on September 8 the picture of good health and vigor. Mr. Thornborn lost heavily in the Gates deal and later in oats, which took all his fortune. After his disappearance he went to London for treatment and there recovered his sight. It is said he may return to the Board.

The estate of the late John Miller, former governor of North Dakota, has been incorporated in Duluth. Gov. Miller, for years previous to his death, was engaged in the grain business in Duluth, where he had extensive interests. The articles of incorporation, just filed, show the company as having a capital stock of \$80,000. The incorporators are Addie S. Miller, Duluth; H. F. Chaffee, Amenla, N. D., and M. M. Chaffee of Duluth.

The Gale Bros. Co.'s September calendar is appreciative of the times—school times for the "kids," who are hovering over papa's chair conning the new lessons that the opening of school in September brings—

School days, school days,  
Good old golden rule days,  
Readin', ritin', 'rithmetic,  
Don't you know it pays to stick  
To the Reliable House?

Capt. I. P. Rumsey of Rumsey & Company, Chicago, while on his vacation trip to Alaska, was a passenger on the ill-fated SS. Ohio and among those who were saved by the heroic Geo. E. Eccles, the operator of the wireless on board the Ohio. "I have read and heard of heroes, from the messenger from Marathon to Richmond Pearson Hobson," said Capt. Rumsey on his return to Chicago, "but when I look into this poor boy's face I believe I see the man who performed the act of most unselfish devotion to duty and thought for his fellow man the annals of history will ever record." He stayed with his captain on the ship, and they gave their lives for their

passengers; and no greater thing can any man do for his fellow man.

L. W. Forbell of the grain firm of Forbell & Kipp, New York City, was appointed by Welding Ring, president of the New York Produce Exchange, delegate to attend the conference in Chicago on September 17 and 18 of representatives from the various grain exchanges of this country and Canada.

John Dickinson, who was once (February 2, 1901) expelled from the Chicago Board of Trade and readmitted in 1905, was again expelled on August 17. Dickinson failed in March last, and there are large claims against him that have never been satisfied as his disappearance prior to his failure prevented his creditors from taking action. Dickinson has been a speculator and a commission man for over twenty-five years. A few months ago Dickinson was seen in Paris, but is now said to be on a sheep ranch in the Southwest.

## HEDGING.

Hedging in the grain business means the sale for future delivery of an amount, kind and quality of grain equal to the amount, kind and quality of stock in hand as a protection against unfavorable price changes.

One of the important reasons to sustain the contention for trading in grain futures is that it provides facilities for "hedging" transactions. Wheat raising in the Northwest has been and is the leading farm industry. This crop in Minnesota and the two Dakotas has ranged from 150,000,000 to 200,000,000 bushels annually for many years. The bulk of it is marketed from the farm in the months of September, October and November, requiring say \$75,000,000 to \$100,000,000 in that time in cash to pay for it, besides the large sums that must be provided to pay for flax, oats, corn and barley.

All this money must go out without having the property here as security for it. These immense sums have to be borrowed through or from bankers chiefly. One of the first requirements of lenders is that the property bought shall be "hedged" to save the borrower from the possibility of heavy loss through declines in prices. Then if the borrower is well and favorably known to be prudent, skillful, honest, of good credit and a party who always keeps his property insured the funds are forthcoming.

All these safeguards are absolutely necessary to satisfy the lender, to say nothing of the safety of the borrower. The principals who are engaged in this "hedging" business include grain merchants, millers or manufacturers of grain products, producers of grain in many instances, and wholesale buyers of grain and flour. The system has grown into use as the demand has arisen. It is so satisfactory to all interests represented that none would see it dispensed with, and is quite as necessary to them as farm machinery is to the farmer. Method and facilities of the best must be used in all affairs if the best results are to be obtained.

Whether grain is bought in the country for shipment to terminal markets or in city warehouses for shipment to foreign countries, to millers or dealers at distant points, for delivery there when transportation can be provided or when called for by the terms of sale, the "hedging" sale must be made or the dealer's financial responsibility is adrift on an open sea and subject at any moment to fatal wreck. A future sale and insurance are the sure safeguards never neglected by prudent grain dealers, prudent manufacturers of grain products or others largely interested in these affairs.—Minneapolis Market Review.

John L. Griffiths, consul-general at Liverpool, in a report to the State Department, says that "the returns of the British Board of Agriculture shows that from year to year the area under cultivation is gradually growing smaller. There are nearly 1,500,000 acres of land less under cultivation now than ten years ago. Extending the retrospect, in 1861, 11,078,000 quarters of wheat (88,624,000 bushels) were grown in England on 3,993,000 acres. Nearly half a century later, in 1909, although the population of the country had doubled in the interval, there were only 6,735,000 quarters (53,880,000 bushels) of wheat grown on 1,786,000 acres. Thirty-five years ago 18,500,000 acres were under the plow, as against less than 15,000,000 acres at the present time. The greatest falling off has been in England and Wales, there being practically no change in Scotland. There are nearly 52,250,000 acres of land on the surface of Great Britain, of which 25 per cent is under arable cultivation. In thirty years there has been a shrinkage of 2,325 in the number of small holdings; that is, farms of fifty acres and less. In the number of larger-sized farms there has been little change, which is explained by the fact that in this class of holdings there are more owners and fewer tenants than in the case of the smaller area, and a higher degree of stability has been secured. The orchard acreage has slightly increased, and a larger acreage has gradually been given to

the cultivation of strawberries, raspberries, currants and other small fruits. A small-holding law has been enacted for the purpose of remedying the existing conditions. It is believed that the only solution of the land question is in providing a few acres of land which a man may cultivate, either as owner or tenant."

## OBITUARY

Asariah Eddy, the oldest member of the Chicago Board of Trade, died at his home in Evanston on August 6, after a brief illness.

William C. Gibhardt, well-known member of the Chicago Board of Trade, and member of the firm of A. J. White & Co., died on August 16, at the age of 41.

J. F. Edwards died in his home at Dallas, Texas, on August 16. For many years Mr. Edwards was engaged in the grain brokerage business at Dallas. He leaves a family.

James Gebbie, of Le Sueur, Minn., for many years manager of the St. John Elevator, committed suicide on August 28, by cutting his throat. Ill health and fear of the loss of sanity caused the act.

Fred Doersch, of Manitowoc, Wis., one of the oldest grain buyers of the city, died recently at the age of eighty years. He was the last survivor of his family, his wife and children having died some years ago.

Daniel Reilly, known as "Old Dan," committed suicide at his home, 216 Park avenue, Chicago, on August 12. He was seventy years of age. A few years ago he was one of the oldest members of the Board of Trade, and for many years in business for himself.

Samuel Mosiman, grain merchant and banker, was killed while riding in his automobile on August 29. He was struck by an interurban car of the Illinois Traction Co. at Morton, not far from Peoria. Other members of his party were seriously, though not fatally, injured.

George Hardy, a capitalist and grain dealer of Union City, Tenn., accidentally shot himself on August 26 while about to shoot some stray dogs on the premises that were annoying him. He slipped, and the pistol was discharged into his bowels, causing death soon after the arrival of the surgeon from Nashville.

J. E. Nicholls, 2114 Blaisdell avenue, Minneapolis, Minn., member of the grain firms of Nicholls & Taylor, of Minneapolis, and McKinley & Nicholls, of Duluth, died at the Northwestern Hospital recently. He was in the grain business at Minneapolis for twenty-four years. He was born in Bradford, Ont. Mr. Nicholls leaves a wife and son, and one sister.

Levi Vogt, a pioneer of Dakota Village, Ill., died at his home at Freeport, Ill., on August 17, of dropsy, at the age of sixty-two years. He was born in Lycoming, Pa., and early in life came to Stephenson county, and eventually engaged in the grain business. Four children survive, Roy, Melbourne and Edna, of Freeport, and Mrs. C. W. Wemple, of Evanston.

George F. Carruthers, member of Merchants' Exchange since 1872, died at his residence in St. Louis on August 12. He went to St. Louis in 1858, and for thirty-five years was in the grain business. Mr. Carruthers was seventy years of age at the time of his death, and leaves a wife and four married daughters. Carruthers Bros. were prominent for years in grain circles. Thos. B. Carruthers is a noted member of New York Produce Exchange, and the only survivor of three brothers.

The inspection fee at Duluth has been advanced from 20 to 25c. per car for wheat, corn, oats, rye, barley or speltz, effective September 1.

Under no circumstances, it appears, may the grain inspector at Montreal inspect grain arriving from Manitoba which is carried on the Western grading.

The warehouse companies of eastern Washington have cut their rates for the storage of grain to 50c a ton from receipt of grain to January 1, and 10c a ton per month thereafter.

Fall shipments of wheat from Tacoma began during the last week of August, when a shipload sailed for Mexico. The first load to Europe was scheduled to sail on September 10. This is earlier than the start last year.

An estimate of the cereal surplus available for export from the Argentine Republic during 1909 fixes shipments of wheat and flour at 3,100,000 tons; linseed, 1,000,000 tons; maize, 2,600,000 tons, and oats, 800,000 tons.

Galveston's grain exports for the season ended August 31, 1909, were 5,541,805 bushels of wheat and 7,677,560 bushels of corn. The amount of wheat was less than for 1908, but the amount of corn was greater.



## HAY AND STRAW

The Ilion, N. Y., hay crop is good this year.

Hope, Kan., anticipates a new alfalfa meal mill. A new alfalfa mill is being built at Meridian, Cal. An alfalfa mill is to be built at Cawker City, Kan. An alfalfa mill is being built at Ellinwood, Kan. The second crop of alfalfa near Salt Lake City is light.

The timothy hay crop of Missouri is below the average.

The hay crop at Deming, Wash., is not up to last year's yield.

Burling, Iowa, reports a bumper hay crop in that section this year.

The hay crop of the Canadian provinces is estimated at 9,000,000 tons.

Blooming Grove and Chatham, N. Y., report a short hay crop this year.

Henning, Tenn., reports a large pea hay harvest in that locality this year.

The alfalfa crop in southern San Pete County, Utah, is the best for years.

Dr. G. S. Fraps, state chemist of Texas, is studying Texas hays and foddere.

A \$10,000 alfalfa mill is being built at Frizell, Kan., by the Newton Company.

The alfalfa mill at Red Bluffs, Cal., recently destroyed by fire, has been rebuilt.

The hay crop at Holland Patent, N. M., is of large yield and excellent quality.

Siskiyou County, Cal., reports a hay yield heavier than any other for several years.

The Alfalfa Products Co., at Geneva, Neb., has enlarged and improved its plant.

The hay harvest near Frenchtown, Mont., is of fine quality and remarkably large.

The alfalfa mill at Tehama, Cal., which burned down recently, will not be rebuilt.

The Canon City, Colo., hay crop is of average yield, and gotten up in good shape.

Colorado's hay yield, which was worth \$20,000,000 last year, is materially larger this year.

W. M. Shook & Co. of Alton, Ill., are building an alfalfa mill and elevator at Quannah, Tex.

Large quantities of alfalfa and grain hay are being baled near Meridian, Sutter county, Cal.

The hay crop in Chippewa County, Mich., is reported a failure, being but a half ton per acre.

The drought prevailing in many sections has affected adversely the production of hay this year.

The hay area of Illinois this year is 2,046,488 acre, and the yield one and three-eighths tons per acre.

Holcomb, Kan., will have an alfalfa mill, built by the Consolidated Alfalfa Milling Co. of Newton, Kan.

The Enterprise, Kan., alfalfa mill is now in operation. The mill is owned by C. Hoffman & Son Milling Co.

Drought has shortened the second crop of clover in Iowa, and a decreased output of clover seed is the result.

Alfalfa, except in portions of the Northwest, has yielded well. But prospects for the last harvest are not promising.

The first crop of alfalfa at Hyrum, Utah, yielded about two and one-half tons an acre, and was harvested in good condition.

Harper & Sons sold their alfalfa mill at Wichita, Kan., recently to H. W. Schopel, J. R. Kenworthy and H. B. Allen for \$15,000.

Kittitas county, Wash., will produce about eighty per cent of the average crop of hay this year. Drought caused the shortage.

The hay crop near Banning, Cal., is unusually large, and of excellent quality. One ranch harvested 1,800 tons from 600 acres.

Outside promoters failed to establish an alfalfa mill at Wamego, Kan., and local interests are urging the organization of a home company.

Fergus County, Montana, is this year producing enough hay to supply the home demand, and more. Usually it is necessary to import hay to this locality.

C. W. Beeman of Malago, near Carlsbad, N. M., thrashed 440 pounds of alfalfa seed per acre this year. The seed brings about sixteen cents per pound.

The Argonia Alfalfa Milling Co. at Argonia, Kan., has a grinding capacity greater than is demanded by the local production and ships in alfalfa from other localities.

J. Edward Taylor, state horticultural inspector of Utah, reports considerable progress in the work of eliminating the alfalfa weevil from the state. He says that stirring up the soil after the crop is cut

not only assists in killing the weevil, but improves the condition of the soil as well.

The Marysville, Kan., alfalfa mill is just starting up. A large amount of hay has been purchased at the prevailing price of eight dollars a ton.

The hay crop of Pennsylvania this year is but 73 per cent of that of last year, although the acreage is about the same, viz., 3,118,000 acres.

The hay crop near Adin, Cal., is very heavy this season, natural grass yielding two and a half tons per acre, and alfalfa two and a half tons per cutting.

J. E. Monroe of Reno, Nev., C. W. Kinney of Fallon and others have organized a company to build and operate an alfalfa meal manufacturing plant at Reno.

The first alfalfa meal mill in the Klamath Basin is now operating at Merrill, Ore., and has proven a success. Numerous other mills are predicted in that locality.

Omaha capitalists contemplate erecting an alfalfa mill at Biggs, Cal. They offer to contract for alfalfa at seven dollars a ton for a term of years. The crop is exceptionally large this year.

Charles Davis of Lyons, Kan., has bought the interest of E. O. DeVoss in the firm of DeVoss & Shafer, alfalfa millers at Hutchinson, Kan., and will be actively identified with the business.

The Athena, Ore., locality has produced a large crop of timothy this year, which it ships to market at a high price. The crop has proven profitable, and an increasing acreage is the result.

Anthony C. Schildgen has bought a site from George Reinberg on Lincoln and Cullom avenues, Chicago, for the erection of stables and warehouses to handle hay, grain and feed. The site is 127½x140.

Schlossburg Bros. have incorporated at Jersey City, N. J., to conduct a hay and feed business, at 32 Manhattan avenue. The capital stock is \$20,000. The incorporators are Samuel and Jacob Schlossburg and Michael Levin.

The L. S. & M. S. have published tariff covering stop-over privileges on hay at Erie, Pa., becoming effective September 24. The American Hay Co., of New York, will commence operating their Erie transfer shed on that date.

The Alfalfa Meal Co. is erecting a plant on Fifth avenue between Twenty-second and Twenty-fourth streets, Omaha, Neb., and will when the new plant is complete, move from its present quarters on Twelfth street and Tenth avenue.

According to a statement of the agricultural department, Texas has a hay acreage of 400,000 acres, with an average yield of 1.3 tons per acre. Among the varieties of hay produced are, alfalfa, Bermuda, pura and sorghum, as well as wild grass.

The Gunnison Valley, Colo., is producing a record crop of hay this year. It is estimated that the usual crop of 75,000 tons will this year be increased to 85,000 tons. A surplus above local requirements of 25,000 tons was sold last year at from \$16 to \$20 a ton.

The department of state has been advised that the British board of agriculture has removed the embargo of July 24 upon the landing of hay and straw in Great Britain from the states of Pennsylvania, New Jersey, New York, Maryland and Delaware.

Prof. E. G. Titus of the Utah Agricultural College has sent out bulletins warning farmers against European alfalfa leaf weevil which has made its appearance and is doing much damage. He admonishes against the shipment of hay from infested districts.

Figures compiled by the Loftus-Hubbard Elevator Co. of Minneapolis, indicate that the hay acreage for 1909 is 23 per cent less than that of 1908 and the tonnage 11 per cent less. This is notwithstanding the fact that conditions under which the new crop is made are better than usual.

The Valley Hay & Grain Co. of Richmond held its annual meeting on September 2. The stockholders are W. H. Acker, J. A. Heath, L. Lovejoy, Bert C. Preston, A. F. Lindke, Jay Baldwin, C. E. Greene, S. D. Grant, Richmond Elevator Co., J. Campbell, O. A. Turk, M. Burkhold. They elected the following officers and directors: President, W. H. Acker; vice-president, A. F. Lindke; treasurer, L. Lovejoy; secretary, J. A. Heath. Directors, L. Lovejoy, J. A. Heath, W. H. Acker, A. F. Lindke and S. D. Grant.

### MARKET FOR AMERICAN HAY IN ENGLAND.

Consul Felix S. S. Johnson, writing from Bergen, Norway, says that according to reports from different parts of Great Britain, the hay crop will be small and the quality poor. Prices are steadily advancing and in mid-August were as useful, \$12.15 to \$18.25 per ton; prairie clover, \$18.25 to \$20.70 per ton; best mixture, \$18.25 to \$20.70 per ton; second class, \$14.60 to \$18.25 per ton. Importations into the United Kingdom from Europe are forbidden, except from Norway, Swe-

den and Denmark. The prohibition against the importation of American hay has been raised.

### ALFALFA PRODUCTS EXPOSITION.

The annual exhibition of alfalfa by the National Association of Alfalfa Millers will be made at Wichita during "fair week," September 20 to 25 inclusive. An "Alfalfa Bungalow" 50x300 feet in size, will be erected, largely of bales of alfalfa, in which will be shown the products of the mills which are represented in the association.

The association will hold its annual meeting at the same time and place. Alva T. Wing, secretary, Wichita, Kan., may be addressed for further particulars.

### BETTER METHODS CALLED FOR.

A heavy shipper for export of Canadian hay complains to the Montreal Trade Bulletin that the carelessness or ignorance of Canadian farmers practically knocks \$2 per ton off the value of their hay for export. The crop of Ontario and Quebec for 1908 amounted to 8,660,000 tons, so that the loss is a heavy one. The correspondent cited (W. H. Dwyer & Co., Ltd.), say:

"We have just this week received returns for clover mixed hay exported to Liverpool at 80s per ton c. i. f., and returns for a lot of poorly saved clover mixed at 10s or \$2.50 per ton less, and same will apply to Timothy. I submit that something should be done to obviate this loss and think if the farmers realized the loss they are sustaining there would be a radical change in their methods of handling their crop. Surely money spent by either Federal or Provincial Governments in educating the farmers in best methods of saving and pressing their hay, would be put to a good purpose."

To which the Bulletin adds: "Now that a good crop of hay is promised, it would be a most opportune time for the Agricultural Department at Ottawa to issue a few instructions to farmers through the country press, or otherwise, regarding the proper methods of curing and baling the product, by which the revenue of the farmers would be increased by many millions of dollars."

### CANADIAN HAY SHIPPERS ASK REFUND.

Canadian hay exporters to the number of about eighty have pooled their vouchers and through Consual & Moyers, attorneys at Washington, will ask the Government to refund \$1,200,000 claimed to be excess of duties paid during a period of twelve years prior to 1882.

According to the statement of the attorneys in charge of the case, during the period named Canadian hay imported paid duty at the rate of 20 per cent ad valorem, as a manufactured article, the customs officials arguing that since the hay had been sun dried and then baled for shipment it was a manufactured article, and, therefore, liable to a duty of 20 per cent instead of 10 per cent as a raw material. This ruling was appealed from, and after many years' delay a decision was given by the United States Customs Board that, despite its sun treatment, hay is a raw material, and as such subject to only 10 per cent duty.

The first case referred to the attorneys named was that of one Blain, who asked a refund of \$825, which gave the lawyers a hint that others also might like refunds. The Canadians say that they had a system of counter-accounts with their consignees, who paid the duties at the point of entry, charging it up to the exporters and deducting it from their credits. In this way these Canadian exporters have no official records of the duties paid, and so may apparently be debarred from entering their claims.

Blain's bill still hangs fire in the Senate, which has not approved the necessary appropriation; but in the present case, the Ottawa government has interested itself.

### COMFRY LYMP.

This is the name of a new forage plant brought to America from the Russian Caucasus by Dr. E. Dreves of Sedgwick, Kan., via Germany, where it has been in cultivation with more or less success for about a decade. It is described as follows:

"The 'Comfry' should not be confused with 'Prickly Comfry,' which was introduced and tried many years ago. It has the Latin name of *Symphytum Aspericentum*. The leaves are very large, heavily veined and very fuzzy. The shape of the leaf is egg-like at the base and long or tapering at the point. The blossoms are violet in color and bell-shaped, growing in clusters. Blooming plants grow from three to three and one-half feet in height. The stems and leaves remain soft and juicy throughout the season and are greedily eaten by the hogs, and being strong in protein are the best possible food for them.

"The crop is enormous, particularly when the soil is fertilized. After each cutting the plant brings forth more sprouts and a plant of two years has a diameter of from one to two feet.

"Cultivation is easily increased if the slips of about one inch in length are planted two inches



deep and two feet apart. The plant thrives best in soil which is not too heavy or dry. Much cultivation is not necessary. It resists cold even below zero and if well taken care of lives twenty years. The roots are not only eaten by hogs, but also by cattle. They acquire a weight of about three pounds and make a good food for winter.

"In the fall, when taking up roots, the slips are prepared and immediately planted. They may, however, be planted at any season. As soon as frost is out of the ground, the plant begins to grow and in four weeks reaches a height of ten to fifteen inches and may be cut. According to climate and soil, of course, six to eight crops per year may be cut."

#### REFORMING THE GRADING OF HAY.

The most important paper read at the recent annual meeting of the National Hay Association was that on "Inspection and Grades" by Joseph Timmons of Kenton, O. It was strike right from the shoulder at the abuses of hay inspection that still obtain in spite of the efforts of the association to improve them. The leading points of the Timmons address were as follows, the paper entire being rather long for publication here in full:

"The question that agitates the National Hay Association far more than any other question that is discussed is the subject of inspection and grades. In an experience of two years as a member of the arbitration committee, I do not think that a single case has come under by observation in which the most vital question in dispute was not the inspection and grading of hay.

"This Association has rules governing the inspection of hay called 'National Hay Association Rules.' Every member affiliating with this Association agrees to abide by its constitution, by-laws, rules and regulations. All do this as individuals, or as firms and corporations, as the case may be. Certain cities throughout the country have their produce exchanges, boards of trade and chambers of commerce. These have their sworn inspectors of hay and grain, whose livelihood depends upon the positions created by the above organizations. As these inspectors are employed for the purpose of meeting the wants of these exchanges, they necessarily are employees of these exchanges. Taking as a criterion the average American citizen, these inspectors are fully as fair and honest as any you could name; but as stated before, they are the employees of the exchanges.

"It is unnecessary here for me to quote the National Hay Association grades. I will simply quote the description of that hay which the National Hay Association has declared to be No. 1 timothy.

"No. 1 timothy hay shall be timothy, not more than one-eighth mixed with clover or tame grasses, good color, properly cured, sound and well baled."

"The National Hay Association is about sixteen years old, and it is unnecessary to go through the whole list of grades. These grades were adopted about the third year of the existence of the Association. I don't think they have ever been changed since. And here I wish to state that there is not a hay grading center in the country that grades hay strictly in accordance with these 'National Hay Association Rules.' I believe that the majority of the shippers here present will agree with me in that they never had a car grade No. 1 timothy in these inspection markets that contained one-eighth clover and other grasses. I have never had that experience; but, on the contrary, such hay always graded No. 2 timothy or No. 1 and No. 2 mixed. Two years ago at Niagara Falls I read a paper in which I claimed in very forcible language that no one should be allowed to come here and affiliate with this Association without abiding by its rules and precepts. I reiterate that statement in my remarks today. If the members of the National Hay Association will not live up to their Grade Rules, then abolish the Rules altogether and make rules that will be lived up to. These Grade Rules prevailed in the Association when it consisted of barely 250 members, and now with 1,000 members radical reforms should be adopted.

"The hay receiver owns the inspector. He gets his commission of 75c. or \$1 per ton, as the case may be, and also the hay after he pays the freight; and the poor devil that ships the hay gets the balance, if there is anything left. What interest has the receiver whether the hay grades Nos. 1, 2 or 3? His commission is secured in any case.

"A gentleman of my acquaintance and a member of the Association, whom if I should mention him, you would recognize as one of the leading hay men of the country, gave me some interesting information drawn from his personal experience. I was discussing the matter of the inspection of hay with him. He claimed that a man who had from ten to twenty years' experience in shipping hay was a better judge of the quality of hay than the inspector in the city, for the reason that if the inspectors were taken out into the country, where hay is raised and baled, many of them could not tell the difference between No. 1 timothy and pigeon grass. He then told this story. A few months ago he was in a large consuming hay market and was invited to go with an inspector to examine two cars of hay that were standing on track awaiting a

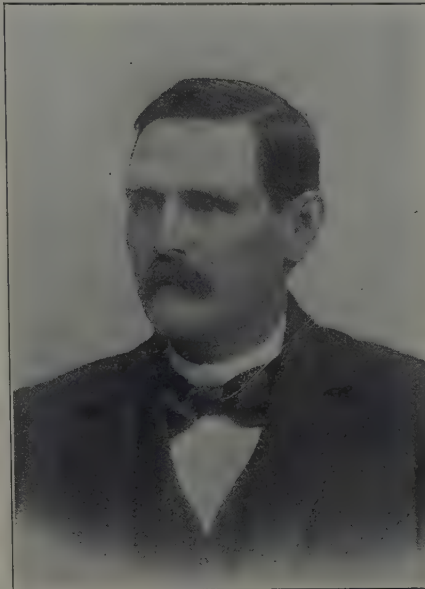
buyer. After examining the hay the inspector asked him why he could not ship nice timothy hay like the hay in the two cars. My friend replied: 'Farmers up in my country do not sell threshed timothy hay, as they have always considered it worthless.' Now the fact was, these two cars were loaded with threshed timothy, but which had a very good color for that class of hay. This same inspector had been finding fault with some of the hay my friend had shipped on account of a little clover mixture in it. This man was a sworn inspector and was supposed to know all about hay inspection, yet the fact developed in this particular instance, as you will agree with me, that he did not know what he was talking about. I have the facts before me and can verify them by the gentleman's personal statement, whom I believe is here today."

[Mr. Timmons followed with a somewhat similar experience of his own in Ohio, and said:]

"I do not claim that the hay inspectors are intentionally dishonest, but I do claim that they are either very careless or not sufficiently educated to be inspectors of hay, at least some of them are. . . .

"Through the kindness of Chas. T. Pearce, chairman of the grades committee, I am permitted to use the following recommendations of that committee, adopted by them at a recent meeting, which is certainly one long step in the right direction to reform this troublesome question, and if adopted the rules would obviate a great deal of this trouble.

"(1) That the grade that constitutes prime or choice timothy hay be eliminated and that the grade



JOSEPH TIMMONS.

of No. 1 timothy hay read as follows: "No. 1 timothy hay shall be timothy containing not more than one-eighth tame grasses, other than clover, properly cured, good color, sound and well baled."

"(2) No. 1 light mixed hay shall be No. 1 timothy mixed, with not more than one-fourth clover, of good color, sound and well baled."

"We further recommend that the inspection and grading of hay in the differing markets be under the supervision and control of the National Hay Association; that the president of the National Hay Association be empowered to appoint a committee of two, the two to appoint the third; that the committee be known as The National Hay Association Grading and Inspection Commission; that this Commission shall consist of three members, one receiver and two shippers; that one member of this Commission to be appointed for one year, one member to be appointed for two years and the third for three years; that after the appointment of this Commission, the members shall be elected in the usual way at the annual meetings of the Association; that the duties of this Commission shall be to investigate the inspection and grading of hay in all the markets the National Hay Association's Inspection Rules are used; that this Commission be empowered to receive complaints and to appoint inspectors in the various markets, and be empowered to remove any inspector and to appoint his successor in case they find the inspection in any of the various markets to be unfair; that this Commission to be under the jurisdiction of the board of directors and that their salaries to be fixed by said board."

"Many of you who are present are aware that a movement is on foot to organize a National Hay Shippers' Association. This Association, if formed, proposes to handle all its own products by hiring salaried agents and locating them in the different consuming markets. Personally, I have never given

this proposition much countenance, but something of this kind is sure to come if this convention does not make radical changes in the inspection and grading of hay.

"The approximate value of a car of hay loaded at the shipping point is about \$125. The commission, weighing and inspection on this value at destination point is about 12 per cent. My friend over there from Baltimore, Toledo or New York charges on a carload of grain amounting to the value of \$1,000 a commission of less than half that charged for hay; so that you see, gentlemen, \$125 worth of hay must have an earning capacity of four or five times as much as the car of grain. This is all out of proportion and is one of the things which is driving the hay shipper into the market to sell his own commodity in order to save the commission. . . .

"I am not here today to criticize the hay receiver. I have dealt with many of them who are before me today, and many of them are the best of the earth. It is the system that I am striking at; the exchanges of the different cities that inaugurate this system, that are almost making beggars of hay shippers, who are simply doing business as tenants common with that of the railroad companies and the hay receivers.

"And right here I wish to draw a comparison between a grain inspector and a hay inspector. A grain inspector takes his tester, goes to the car, opens it and gets into it and tests that car clear to the bottom eight or ten times; takes the ingredients of his tester, empties them out, and from the different contents inspects the car. This is inspection which is bound to be correct. For this the grain inspector charges 50c. and not to exceed 60c. The hay inspector goes down the track with some railroad employe who opens the doors of the car. The inspector sometimes never touches a bale; goes back to his office and writes out an inspection certificate grading that car of hay, for which he charges \$1. The certificate itself is a beautiful lithograph and resembles in appearance a national bank note, and sometimes when I open one of these letters I think I am getting a New York draft, so beautiful is the printing with its adornments, often a large building in one corner resembling the Spanish Inquisition. But usually after I have read this certificate all my hopes are blasted, as I am informed that so many bales at the door grades No. 1, so many No. 2 and so many no grade.

"Then comes a weigher who invariably charges \$1 for weighing, making \$2 for weighing and inspection. I don't say that this always prevails, but almost invariably it does. I spent a week in a Southern city the first of the year, and while there fully investigated the manner of inspecting hay in that city, and I stand anxious to testify that the hay inspector of that city did not see one-third of the hay that arrived there. I did not have the pleasure of meeting him during my stay there, and yet I was there looking after my hay shipments. The only manner of inspection that I saw there was the broker taking a customer down to the car, opening the doors and showing him the hay; and between the broker and the customer, perhaps several customers, they would arrive at about what the hay was worth, and the price was always a compromise and invariably to the detriment of the shipper. Yet some of those hay receivers send out their letters and circulars with the red insignia thereon that hay is graded in accordance with National Hay Association Rules. If they would only apply the Golden Rule to their conduct there might be some consistency to their actions; but their rules for grading hay is so far away from National Hay Association Rules that no resemblance can be traced.

"It is not the inspection of hay from one grade to another that hurts the shipper so much, as it opens up the whole question of price and allows the receiver to put what prices he pleases on the off grades and here is where the abuse comes in. The off grades are usually put at a price of \$1, \$2, or even \$3 lower; so that when the shipper receives his returns he not only loses his profit but \$25, \$30 and even \$50 more, requiring him to ship several cars more to make up his losses.

"The system of inspecting and grading hay should be the same as the inspection and grading of grain. Where an inspector does not see every bale of hay in the car he is not the proper person to inspect that car of hay.

"In this connection let me say that the hay shipper is not infallible by any means. He very often does not ship the kind of hay he invoices. No shipper, whose territory embraces a large area, can see all the hay that he loads into the car. He depends to a large extent, and sometimes altogether, on the statements of his employes, who are fully as liable to errors and mistakes as the graders and inspectors. I know it occurs in my business and it will occur with others who cannot get over their territory and personally attend to the loading of their products. In the loading of hay it is mostly loaded from the farmers' wagons, and in this way does not run uniform in grade and color, and very often in out of the way places where it cannot be properly assorted, it is allowed to go into the car and invoiced at a grade above what is actually in the car."



*Note.*—The report and recommendations of the committee, referred to by Mr. Timmons were subsequently submitted to the Association and recommended to the committee which was then enlarged by the addition of ten new members, as follows: E. A. Dean, Charles S. Maguire, George S. Bridge, E. L. Rogers, Grant Pollock, Cyrus H. Bates, Thos. P. Riddle, J. A. Heath, James Stemmel and N. A. Fuller. Still later this committee submitted the following resolutions which were unanimously adopted by the convention:

"Resolved, That this committee report to the Association that we recommend that the present Rules for grading remain in effect during the ensuing year; that the committee on grades be instructed to investigate and solicit suggestions for an improved system of specifications to govern the grading of hay; and that the committee on grades be instructed to confer with the United States Agricultural Department with a view of securing some system that will meet with the approval of this Association and the Agricultural Department.

"Resolved, That this committee, appointed by the Association to report upon the grades committee's recommendation concerning National Hay Association assuming control of hay inspection and weighing, report to this convention, recommending that the Association employ the services of an expert for the ensuing year to visit the various shipping and receiving centers of the country for the purpose of making a thorough investigation of the present system and practice of hay inspection and weighing, and that this employee be under the authority and direction of the executive committee of this Association to work in harmony with the grades committee.

"Resolved, That we recommend to this Association that the grades committee be instructed to publish and distribute according to their judgment all suggestions received for the information of the membership, and that the expense be defrayed by the Association."

#### VIEWS OF THE INDIANA SHIPPERS.

Apropos the same subject the Northeastern Indiana Hay and Grain Producers' and Shippers' Association adopted the following resolutions:

"Whereas, We have long recognized the present National Hay Association Grading Rules as being defective and conspicuously inadequate for attaining uniform conception and a uniform practice in applying them in the grading of hay in the various shipping centers and in the various consuming markets; and,

"Whereas, We believe National Hay Association control or supervision of hay inspection and weighing practical and urgently desirable; be it

"Resolved, That we commend the action of the National Hay Association in assuming the employment of a specialist for the ensuing year, for the purpose of making a thorough and competent investigation of existing conditions with respect to the adequacy of the present Grading Rules and the practice of hay inspection and weighing, with the view of determining and recommending to the National Hay Association at its next convention a system of grading specifications and a plan for National Hay Association control or supervision of hay inspection and weighing."

#### NEW YORK HAY DEALERS' MEETING.

The fourth annual meeting of the New York State Hay Dealers' Association was held at Syracuse in August. About 150 members and visitors were present.

Officers were elected as follows: President, Daniel S. Wright, Weedsport; vice-president, George S. Ewart, Groveland; secretary, C. A. Coleman, Savannah; treasurer, Frank Bloomingdale, Voorheesville; directors, F. C. Mulkin, Friendship; J. W. Dusenberry, New York; John P. O'Hara, Moravia, and B. A. Dean, Auburn.

A committee was appointed to investigate the delays in transportation, and to devise a remedy, if possible.

The dues were increased to \$2 per annum.

The papers read at the meeting were by Egil Steen of Baltimore on "Closer Affiliation among Receivers," and Geo. Cole of Ithaca, on "Closer Affiliation among Shippers."

Among other things Mr. Steen said: "There is one matter on which receivers not only can, but should cooperate, not only to their own great advantage but for the interest of all reputable shippers; and that matter is the elimination of the unscrupulous, irresponsible, dishonest and 'wildcat' shipper. I mean the shipper that buys recklessly, promises the farmer anything in order to get his goods, and who when he finds that his recklessness has made him over-pay value, does not hesitate by various fraudulent methods of one kind or another to make up not only his loss but also a profit besides out of some receiver, and who often by crooked dealing with the farmer from whom he bought the stuff, makes the row so much harder to hoe for reputable dealers, who are trying to do a straight business at shipping points. If by cooperation we can eliminate such undesirable element from the business, then let's have co-opera-

tion and plenty of it, and a great good will be done us all. Why, I know of a recent instance where a straight and heretofore successful hay shipper was actually forced out of business by a dishonest shipper who 'stuffed' or false-packed his hay;—that is to say, he put prairie, or some inferior grade of hay on the inside, and No. 1 timothy on the outside of his bales. The honest shipper, shipping from the same station, in an effort to compete, had all the tags on his hay marked: 'Guaranteed not white-washed'; but to no avail, for in the end he was 'white-washed' himself and forced out of an independent livelihood by the rival shipper's dishonesty, aided and abetted, I say, by some receiver, or receivers who handled his goods."

#### THE HAY CROP FOR 1909.

In accordance with a resolution of the National Hay Association directing the secretary to publish the report of the Committee on Statistics in part only, Secretary Vining submits the following figures:

"Desiring to secure the latest and most reliable new hay crop information available, in order that it might serve the members of the National Hay Association in determining the true market value, the Statistics Committee addressed 452 representative members stationed in 33 states a list of questions bearing upon the new hay crop. From the responses in hand, which are based on conditions July 20th, which covers the crop after it had been harvested, we deduct that the acreage of the 1909 crop is 22 per cent less than the acreage of the 1908 crop and 17 per cent less than the acreage of the five-year average. In addition to the decreased acreage of the 1909 crop, the tonnage is 11 per cent less than the tonnage per acre of the 1908 crop and 8 per cent less than the tonnage per acre of the five-year average. The condition under which the new crop of hay is made is 27 per cent more favorable than the five-year average. The following estimated classification of the new crop of hay is made with a comparison with the 1908 crop and with the five-year average:

| Classification.   | This Crop. | Last Crop. | 5-Yr. Av. |
|-------------------|------------|------------|-----------|
| Timothy .....     | 58%        | 31%        | 45%       |
| Clover mixed .... | 30%        | 50%        | 37%       |
| Clover .....      | 12%        | 19%        | 18%       |

"There is reported on hand July 20, in original hands 32 per cent less old hay than the five-year average."

The Orange-Judd Farmer of August 24, as to the hay crop, said, in part, "While it is too early to give a final estimate as to the output of meadows, information available to date indicates that a large yield of hay has been secured. This fact has been reflected in Orange-Judd Farmer's hay crop reports of recent weeks. The Southwest, of course, is short, due to drouth in Texas and Oklahoma; in the other states the crop developed under very favorable conditions. . . . In the states where alfalfa is grown conditions are similar. The yield of alfalfa is heavy, ranging from two to six tons per acre."

"The final estimate of the hay crop will not be made until later in the season. Tentative figures may be interesting. The table below indicates that the crop of 1909 will be about equal to that of 1908, which was a record-breaker. Carefully compiled returns from our correspondents indicate that the average yield per acre, the present season, will be 1½ tons, which is practically the same as that of 1908, when our reports showed a yield of 1.47 tons.

| State—          | Tons. | State—             | Tons. |
|-----------------|-------|--------------------|-------|
| Texas .....     | 0.62  | Iowa .....         | 1.66  |
| Arkansas .....  | 1.90  | Missouri .....     | 1.29  |
| Tennessee ..... | 1.47  | Kansas .....       | 1.47  |
| Kentucky .....  | 1.38  | Nebraska .....     | 1.55  |
| Ohio .....      | 1.48  | North Dakota ..... | 1.48  |
| Michigan .....  | 1.17  | South Dakota ..... | 1.66  |
| Indiana .....   | 1.35  | California .....   | 2.52  |
| Illinois .....  | 1.30  | Oregon .....       | 2.56  |
| Wisconsin ..... | 1.54  | Washington .....   | 1.65  |
| Minnesota ..... | 1.78  | Oklahoma .....     | 1.20  |

The Montreal Trade Bulletin on August 20 said of the Eastern Canadian hay crop: "Allowing for a few sections in which the yield is below an average the crop of hay in the province of Ontario is a fairly good one, and has been gathered in good condition. New hay in some instances has been pressed for export, which is thought to be risky, especially if it be damp in the slightest degree. In fact, we know of cases where this season's hay has been pressed on the field before it has been allowed to properly dry or mature in the stack or barn. There is very little old hay on the market, as farmers have sold it up closer than for several years past, and this probably is why farmers are pressing their new hay earlier than usual."

The English crop is below the average. Retarded by drought up to the end of May and thereafter by cold winds and lack of sunshine, there was on the meadows an almost general thinness and lack of valuable bottom grass which adds so materially to the weight and worth of the crop. Unreliable weather also was experienced at the ingathering of the new crop.

Elevators at Duluth-Superior will charge 1c. per bu. for unloading grain in sacks and \$3 per car for bulkhead cars.

## COURT DECISIONS

[Prepared especially for the "American Elevator and Grain Trade" by J. L. Rosenberger, LL.B., of the Chicago Bar.]

#### Liability of Seller of Seed Warranting Same.

The Supreme Court of Florida, Division A, holds (Vaughan's Seed Store vs. Stringfellow, 48 Southern Reporter, 410), that a person is not liable in damages for the remote consequences of his act or for conjectural consequences. Damages to be recoverable must be both the natural and proximate consequences of the wrong complained of.

Where one sells seed under a warranty, and the seed produce a crop not harmful to the land but of a poorer character, or of an inferior quality and less value than would have been produced had the warranty been fulfilled, the measure of damage is the value of the crop of the true product such as the seed was warranted to produce and such as would have ordinarily been produced that year, less the expense of raising it and less also the value of the crop actually raised from the seed delivered.

Where one sells seed under a warranty and the seed bought prove to be worthless—that is, where they wholly fail to germinate, or grow, after having been planted, and no crop results from planting the seed delivered—the only damages recoverable are the price paid for the seed, the expense in preparing the soil for the seed and for planting the same, together with the loss sustained from having the land lie idle for the year, or for such time as the use of it was lost.

#### Right of Hay Shippers to Cars.

In an action in mandamus to compel a railway company to furnish cars for a shipper, where the proof established that he desired to ship his hay in carload lots; that he had repeatedly requested the carrier to furnish him cars for said purpose, that it had failed to do so, and that no reasonable excuse was shown for such conduct, the Supreme Court of Nebraska holds (State vs. Chicago & North-Western Railroad Co., 120 Northwestern Reporter, 163), that a peremptory writ of mandamus in favor of the shipper was proper.

The court says that independent of the commission law or any other special statute it was the company's duty to furnish reasonably adequate provisions for the transportation of freight offered it for shipment over its railway, and to serve its patrons without discrimination. The courts will compel by mandamus the discharge of such duty in a proper case. Any other remedy is not adequate, unless it will furnish the aggrieved party relief upon the very subject-matter of his application. In cases like the one under consideration proceedings before the commission will not afford that relief. The order, if made by the commission, is simply a step incident to an action in the district court, which may be anticipated and restrained by the carrier for an indefinite time, by an action in a court distant from the residence of the complainant.

In another case decided at the same time, namely, State vs. Chicago & North-Western Railroad Co., 120 Northwestern Reporter, 165, the same court says that the railway company so distributed its freight cars that empty cars were ordinarily retained on the division where they had been unloaded until they could be reloaded with outgoing freight. It also preferred shippers of live stock, grain, and all kinds of merchandise over the shippers of hay located at noncompetitive points on its railway, and during a hay blockade at its terminals in Chicago and Omaha withheld cars for the shipment of hay to other points until the congestion at said terminals was relieved. It is held that this was an unlawful discrimination against the shippers of hay.

More at length, the court says that the record in this case fairly warranted this deduction:—That because of the lack of competition the company had a monopoly of railway transportation from several stations in the "hay belt" on its line of railway; that it was more profitable for it to have the traffic in hay distributed throughout the year, so that cars used for that purpose might be supplied from freight cars loaded with articles that were shipped into the "hay belt;" that preference was given shippers of live stock, grain and merchandise over those offering hay for transportation; that in case of a hay blockade on the team tracks in Chicago and Omaha empty cars were withheld and were not supplied to Nebraska hay shippers without regard to the destination of their consignments; that in case of extreme demand for motive power and empty cars during the range cattle shipping season, the "hay belt" was discriminated against as compared with other territory tributary to the defendant's railway; that this discrimination was induced by the determination of the company to handle all of the traffic it could control with the greatest economy in the management of its business and resulting profit to itself, etc. The complaining shipper should have received a just division of the cars that ought to have been apportioned to his station,



and that number should have been greater than was furnished by the company.

### ARBITRATION DECISIONS.

The following recent arbitration decisions have been made by the arbitration committee of the Texas Grain Dealers' Association:

**Texas Grain & Elevator Co. vs. Collinsville Mill & Elevator Co.**—In the above styled cause pending adjustment by the arbitration committee of the Texas Grain Dealers' Association, we, the said committee, find as follows:

From the papers submitted the committee finds that on January 6th the defendant sold the plaintiff three cars of corn chops and ordered 250 sacks shipped to San Angelo, Texas. On January 13th defendant shipped 300 sacks on this order and when the car arrived at destination it was found to contain 250 sacks. The weights at point of origin and destination are both certified under oath. Plaintiff sent defendant confirmation providing for destination weights. Defendant's confirmation is silent on this point. Defendant claims he did not receive plaintiff's confirmation.

The committee finds for plaintiff under Rule 34, Texas Grain Dealers' Association Trade Rules, which provides as follows: "Where nothing is said in the contract as to what weights and grades will govern, it is understood that destination weights and grades shall govern." The plaintiff was obliged to pay freight on 300 sacks of chops because the defendant billed this number in the car and it was not weighed in transit by the railroad company. The committee therefore finds for plaintiff as follows:

50 sacks chops at \$1.15 cwt. .... \$57.50  
Freight on 50 sacks at 15c cwt. .... 7.50

Total ..... \$65.00

Therefore, it is ordered that the defendant, the Collinsville Mill & Elevator Company, immediately pay to the plaintiff, the Texas Grain & Elevator Company at Fort Worth, Texas, \$65. The secretary is hereby ordered to return to the plaintiffs their deposit fee and to the defendant such papers as may be required to file claim against the railroad company for the loss in chops and freight.

**J. E. Ervino & Co., plaintiffs, vs. Wisrodt Grain Co., defendants.**—It appears from papers submitted that defendants sent plaintiffs a statement, showing a credit in favor of plaintiffs, amounting to \$57.05, growing out of several transactions between the parties. Later defendants charged plaintiffs with two counter claims, amounting to \$80.38 and \$16.95, involving two separate shipments as follows:

The first claim arose out of a shipment of a car bulk corn by plaintiffs to Lake Charles, La., on an order from defendants. The original confirmations of this trade are not submitted to the committee, but from subsequent correspondence between the parties, they appear to agree that destination terms were to govern in final settlement. It appears that the parties at destination to whom defendants sold the corn failed to weigh it when unloaded, but claimed a shortage, upon which defendants base one of their counter claims, and submitted to defendants no other evidence at the time to substantiate this alleged shortage, except a written statement setting forth that the amount of bulk corn received in the car in question produced 523 sacks of corn chops and 113 sacks corn of a specified weight.

The committee is of the opinion that in the absence of some evidence to show that the corn was actually weighed at the time of unloading, J. E. Ervino & Co. are not liable to Wisrodt Grain Co. for the amount of this claim.

The second claim arises from a transaction in which plaintiffs shipped to defendants at Galveston, Texas, a car of Johnson grass hay on an order for choice Johnson grass hay at a specified price delivered Galveston. On arrival of the hay defendants notified plaintiffs that the hay appeared to be damaged and was not by any means choice; that they, the defendants, had instructed that the hay be unloaded and that the bad bales be counted out, and would expect to be reimbursed for any damage on this account. Plaintiffs replied that the suggested manner of handling was satisfactory, and asked that defendants furnish affidavit as to the quality of the hay contained in car and other papers to substantiate any claim that they might decide to make, in order to afford plaintiffs protection against parties from whom they had bought the hay. There are no papers or affidavits submitted to the committee, substantiating the damage on this hay, and no evidence that any such papers were ever furnished to the plaintiffs.

The committee is, therefore, of the opinion that plaintiffs were justifiable in declining to allow the claim.

The committee, therefore, finds in favor of the plaintiffs, and hereby orders Wisrodt Grain Co. to pay to J. E. Ervino & Co. at Fort Worth, Texas, the sum of \$57.05, and instruct the secretary to return to J. E. Ervino & Co. their deposit fee in this case.

## IN THE COURTS

The Kymberly Seed Co. of California and other California creditors have filed an involuntary petition in bankruptcy in the Federal court at Springfield, Mo., against the Planters' Seed Co., alleging that the company is insolvent and owes the companies instituting the action \$2,000.

At a recent conference of the creditors of Arthur J. Rieger, elevator man at Wallace, S. D., who some months ago was thrown into bankruptcy, referee Henry A. Muller, decided to pay a dividend of twenty-five per cent out of funds on hand. It is estimated that the creditors will receive thirty to thirty-five per cent. The total liabilities amounted to \$192,000, and the assets were \$98,000.

The Hardy Grain Co. of Union City, Tenn., on August 30 made an assignment to L. S. Parks and W. H. Swiggart; assets, about \$100,000; liabilities, \$1,200,000 or more. Geo. Hardy, president of the company, accidentally killed himself some days before the assignment, which precipitated a small run on the Union City Banking and Trust Co., which, however, stood the pressure successfully. On September 2 the attorneys of the creditors filed at Memphis against the company a petition in involuntary bankruptcy.

C. D. Irwin of Concord, Mass., filed a voluntary petition in bankruptcy in the United States District Court on August 17. His indebtedness is \$452,630, most of which is as a partner with A. W. Green in the firm of Irwin, Green & Co., grain brokers of Chicago, which was dissolved in 1905. He has no assets. He owes \$112,950 to secured creditors and \$339,580 to unsecured creditors. The largest secured creditor, George S. Hutchinson, of Boston, for \$100,950, and the largest unsecured creditor is the Bank of Montreal, at Chicago, \$144,308.

John E. Von Dorn of Omaha, who has been a grain dealer, cash buyer, commission man and elevator lessee for ten years or so, with office in the Board of Trade building, on September 3 filed a petition in bankruptcy, giving his occupation as a lawyer. Von Dorn scheduled his debts at \$16,288, including in the list of creditors numbers of grain shippers in Nebraska and Iowa. In his assets (\$8,275.96) he schedules as "choses in action" contracts aggregating \$6,764; notes totalling \$1,150, and a membership in the Chicago Board of Trade. [His name does not appear in the official list of members of the Chicago Board.]

J. G. Walter of Sioux Falls, S. D., president of the late Plymouth Elevator Company of that place, was arrested at Saskatoon, Alberta, on September 3 and taken to Minneapolis, charged with obtaining money under false pretences. The warrant was sworn out by the H. Poehler Grain Company. The complaint is that Walter borrowed \$10,000 in July, giving a list of the properties owned by his company; that he represented it to have elevators at Sioux Falls, S. D., Doon, Ia., Magnolia, Ruhsmore, Lake Wilson, Avoca, Blue Earth, Ottawa and St. Peter, valued at \$5,000; that it owned flaxseed, real estate, bills receivable, and other assets, making a total of \$71,679.36. On the strength of this statement the Poehler Company says it loaned \$16,600. The complaint charges that the statement as returned by Walter was not a true one. Walter's company failed in July and its affairs are now being wound up in the Sioux Falls courts. Walter, in his cell at Minneapolis, refers all to his attorneys. He is well known in the grain trade of South Dakota and southern Minnesota. He maintains innocence of any wrong-doing and allowed himself to be brought to the United States without extradition papers.

### OWNERSHIP IN CASE OF LARCENY.

Where a freight car loaded with wheat is standing upon the side track of a railway company for the purpose of being switched by said railway company to an adjacent mill, where it is to be unloaded, and while the car is so situated, wheat is stolen therefrom, the Supreme Court of Kansas holds (State vs. Laird, 100 Pacific Reporter, 638), that the railway company is the owner of the wheat taken to the extent that a charge of larceny predicated upon such ownership will be sustained, under a statute providing that if any larceny be committed in any railway depot, freight car, etc., the offender may be punished, etc.

### "GOOD" AND "SOUND" CORN.

In an action brought to recover damages for an alleged breach of a contract to furnish 1,500 barrels of ear corn, "to be of good merchantable condition," complaint was made that in instructing the jury the trial judge used the phrase "sound merchantable corn," instead of "good merchantable corn," the latter phrase being the words of the contract. But the Court of Appeals of Kentucky holds (Stahr vs. Hickman Grain Co., 116 Southwestern Reporter, 784), that there was no error in this. It says that the meaning of the words "sound" and "good," in

the connection in which they were used, is substantially the same. The jury could not have failed to understand what they were called upon to decide.

### ARBITRATORS—A NOVEL POINT.

In the King's Bench Division of the High Court of Justice, Mr. Justice Pickford, sitting as commercial judge, recently heard a case in which the point was raised whether the award of arbitrators appointed under the contract of a corn exchange association, but unqualified according to those rules, could be held good in law.

The action was brought by Messrs. Jungheim, Hopkins and Co., who sought a declaration by the court that an award dated December 12th, 1908, in an arbitration between them and the defendant, P. Fonkelmann, of Odessa, was null and void. The contract out of which the arbitration arose was in respect of the purchases by the plaintiffs of 2,000 qrs. of South Russian Wheat at 41s., less 2½ per cent per 492 lbs. delivered, including freight and insurance to London. This sale was concluded under the Black Sea and Danubian grain contract of the London Corn Trade Association. A dispute arose out of a delay in the delivery and ultimately the dispute was referred to arbitration, each party appointing an arbitrator under the rules of the London Corn Trade Association, while the arbitrators themselves appointed an umpire. The arbitrators gave their award in favor of the defendant in this action, and on an appeal being taken to the committee of appeal of the London Corn Trade Association that body confirmed the award.

But when the defendant took out a summons to enforce the award the plaintiffs raised this point, that neither of the arbitrators being qualified to act in that capacity under the rules of the London Corn Trade Association the award was invalid and not binding on them. The next stage in the dispute was this action brought by the plaintiffs for the purpose of having the award declared null and void.

Mr. R. Jungheim, a member of the plaintiff firm, stated in court that he was unaware of what he held to be the disability of the arbitrators till after the appeal had been lodged. It was contended on behalf of the plaintiffs that having consented to the nomination of the arbitrators in ignorance of their disqualification they were placed in the same position as if they had not consented.

On the part of the defendant it was urged that submission having been effectively made to the award of the arbitrators, the plaintiffs were precluded from now disputing the award given and confirmed by the committee of appeals of the London Corn Trade Association.

Judgment was reserved for consideration of the arguments advanced. Ultimately Mr. Justice Pickford decided in favor of the plaintiffs. His Lordship remarked that it seemed not to be unusual for parties to an arbitration under London Corn Trade Association contracts to disregard the rules as far as they related to the qualifications of arbitrators, and to appoint any person in whom they had confidence irrespective of the qualifications required by the contract. It had been contended, his Lordship proceeded to remark, that in this case there had been an agreement to refer to the two arbitrators' nomination, and that on that account there had been a legal submission to their award, in spite of the technical informality of their appointment. He could not take that view. He did not believe that the parties had intended to make any submission outside the contract.

Two points had been raised by the defense. It had been argued that the plaintiffs by appearing before the arbitrators, had waived any defect in their qualifications, but in all the cases he had found bearing upon waiver the principle admitted was this, that if a man knew of a disqualification or defect in the arbitrator or proceedings, and elected to go in, he was precluded from afterwards objecting. But he could not find a case where a man had been held to have waived a thing of which he had no knowledge. Now as the plaintiffs did not appear to have any knowledge of the want of qualification in the arbitrators he did not think they could be held to have waived it. There was the further question whether they were stopped by going on and therefore by tacitly representing that the qualification of the arbitrators was good, that there was a valid appointment and that there was a valid arbitration. As far as their own arbitrator was concerned that might be so, but such a contention could not apply to the appointment of the defendant's arbitrator. They had made no representation as to the qualifications of the defendant's arbitrator, because they believed him to be properly qualified, and therefore they were not precluded from subsequently taking an objection to the want of qualification of the defendant's arbitrator under the contract. The fact that the plaintiffs afterwards appeared before the Committee of Appeal of the London Corn Trade Association could not make the award good, if, as he held was the case, it was bad from the beginning as being made by persons not qualified under the contract. The award was accordingly declared to be invalid.—Corn Trade News.



## BARLEY and MALT

The Red Wing Malting Co., of Zumbrota, Minn., has employed O. A. Stondahl as manager.

Barley near Adin, Modoc County, Cal., yielded as high as eighty bushels an acre this season.

The Canadian Malting Co., of Winnipeg, are building two concrete storage tanks, at a cost of \$30,000.

It is estimated that the three western Canada prairie provinces will this year produce 30,542,000 bushels of barley.

Ely Bernays, of New York, one of the large export buyers of barley, has been in Minneapolis recently looking after the interests of his company.

The Chicago Board of Review raised the assessed valuation on the elevators of the malsters in this city to \$2,055,000, as against \$1,200,350, on which they were taxed last year.

The quality of new barley, as reflected by the receipts at Minneapolis since August 1 is generally poorer than last season. There is a large percentage of thin, dark-colored grain.

New Richmond, Wis., barley is poor in quality, light in yield, badly discolored, and fit only for feed. It is estimated that most of the barley raised in that vicinity will be about nine cents off on color.

Union Winter Barley proved to be the best stooler in some Indiana experiments and to take the quickest growth early in the fall. The best time to sow this crop seems to be about September 15, if the land is in good condition.

Henry Greve, the "Barley King" of St. Louis, has recently made a trip through Minnesota and Wisconsin. From a malster's standpoint he regards the barley crop as exceedingly poor, owing to discoloration, due to excessive rains. He says the discoloration might have been avoided had the farmers stacked their barley immediately following the harvest.

Chas. F. Glavin of Milwaukee, a barley specialist, estimated the U. S. barley crop at 180 million bushels. "The crop is spotted and will range from 36 to 37 pound barley, or feeding grades, to the choice 50 pound malting barley," he says. "Wisconsin has about an average crop. There will be plenty of malting grade barley to go around and a good export trade."

Following an original action of the Minnesota Board of Grain Appeals to allow dockage for dirt on inspecting barley, the Brewers' and Maltsters' Association of Milwaukee adopted resolutions declaring that unless the Wisconsin grain inspection board would make the same changes, they would send resident buyers to Minneapolis and do their business there. But the Minnesota action has been rescinded.

"Most of the Iowa barley will be feed barley," said G. J. Zimmermann of the Milwaukee Malting Co., "and the crop will be 20 per cent less than last year. It is not good enough to make good malting barley; some is very light. Minnesota has a yield about 15 per cent less than last year, with the quality better than in Iowa. In most of South Dakota the barley crop is not anything to brag of. Estimates are for a yield in this district of 30 bushels an acre of fine malting barley."

Several of the barley fields in the Grangeville district in central Idaho are yielding from 80 to 100 bushels the acre. The first grain shipment of one car was made from the Flynn Warehouse, a few days ago. All the houses are full and the grain is just beginning to come in. At existing prices, and in view of the big yields, the barley fields are earning more money than the wheat this year, and it is probable that the acreage in barley will be largely increased in 1910. Buyers at Grangeville are paying 70 cents for wheat, 95 cents a hundred for barley and \$1.05 a hundred for oats.

### \* SELECTING SEED BARLEY.

The very finest samples of brewing barley are not too good to use if we wish to grow first-class malting material, and even these should be screened in order to remove the thin and badly-developed grains. Another important point is the absolute sweetness and dryness of the seed grain. The malting process is merely an artificial imitation of the natural changes that take place when the barley is placed in the ground, and by studying the former we may gain much valuable information respecting the latter. If a malster employs barley which has been irregularly grown and ripened, or has been allowed to become damp or out of condition, he knows better than to expect the corns to shoot evenly, or for root and plumule development to be regular and uniform. We may fairly assume that this irregularity of growth upon the floors is an indication of what we may expect when using such material for seed purposes. The planted grain will commence growth unevenly, the plants will develop unevenly, and the heads ripen irregularly. Under such circumstances we cannot look for a crop of good malting barley. When compelled to use

barley out of condition, the malster derives considerable benefit from kiln drying, or artificial sweating and we cannot but think that the farmer would do well to follow his lead.

### BARLEY DRYING.

From trials made with a number of samples of barley, with varying percentages of moisture, Kiesling is convinced that the proper temperature to be employed in drying depends on the degree of moisture present. If the limit in any case be exceeded, the barley will be injured, the heat stimulating the premature development of the embryo before the latter is in a fit state for growth. At the same time the heat may directly injure germs that are otherwise sound and mature, so as to weaken, and in some cases kill, the corns. Consequently, while all corns that are dried naturally, or at a low artificial temperature, will mature for germination after due storage, this is not the case with those that have been strongly heated; and the percentage of non-germinating corns will be greater in proportion as the drying temperature and the previous moisture content were higher. Independently of these conditions, however, and of the degree of ripeness of the corns, different kinds of barley behave differently under artificial drying.

The practical deduction from these experiments is that the slow after-ripening of the barley corn in store cannot be replaced by artificial drying, and that special care is necessary in the application of such drying processes to new grain in order to prevent considerable injury.—Zeits ges. Brauns.

### THE BARLEY CROP.

E. P. Bacon & Co., Milwaukee, in their annual review of the barley crop say, substantially, that, "Wisconsin reports indicate a smaller production than last year on account of lighter yield and a slight decrease in acreage. Quality varies materially and on the average is not as choice as last year. The berry is uneven, the larger percentage being medium and light weight, but generally sound. Color is irregular, considerable being quite discolored, but mostly good color, depending upon harvesting conditions. A large percentage will be 'mottled' when threshed. Minnesota reports are from the southern and western barley sections of the state and indicate somewhat smaller production than last year on account of lighter yield. Quality varies materially, ranging from feed to choice malting, but apparently the larger percentage is of the latter. The berry is largely reported 'light weight' and 'medium' and considerably blighted, but generally sound. Color is uneven, a large percentage being discolored, but apparently about one-half is reasonably free from damage in this respect. Iowa reports indicate material decrease in production as compared with last year on account of smaller yield, also slight falling off in acreage. Quality averages inferior, the larger percentage being damaged and unsuitable for malting. The berry is largely shrunken and blighted, but a fair proportion is medium to plump and reasonably sound. Color is uneven, discoloration being general and only a small percentage free from this defect. South Dakota reports indicate a smaller production as compared with last year on account of lighter yield and slight shrinkage in acreage. Quality is uneven, averaging lower than the two previous crops, and a smaller percentage suitable for malting. The berry is largely shrunken, due to blight caused by heat. A fair proportion, however, is good weight and no material unsoundness is reported. Color is uneven, a larger percentage than usual being discolored, a majority of the reports indicating damage in this respect, and much of it will be 'malted.'"

"In summing up the whole barley crop condition," says Wm. H. Prinz, in American Brewers' Review, "we shall have a very much mixed crop, with less good malting barley than last year; and when the final government crop report is issued, the percentage will be lower than expected, with much lightweight and stained barley. But as the oat crop will be better and not so much barley used for mixing, I look for lower prices. But with lower prices much barley will be exported to Europe as the feed crop over there is short. Then we must consider that the old crop is all used up, the maltster carries no barley or malt into the new season, and good malting barley will not be as cheap as some expect."

In Kansas City, it appears, within two weeks no less than 700 to 800 cars of wheat arrived so billed that the ownership of the grain was uncertain, due to carelessness of shippers and railway agents.

Horace D. Webster purchased the property of the insolvent Marshall Hay & Grain Co., at 338-40 Chelsea street, Boston, on August 19, for \$4,550, at mortgagee's sale. Mr. Webster is a partner of Arthur K. Tapper, the trustee in the bankruptcy proceedings of the Hay & Grain Co. and had taken a mortgage on the property when the company went into bankruptcy. Louis Canner, the manager of the company, is now under arrest charged with concealment of assets.

## CROP REPORTS

Estimates place the damage to corn in Nebraska at 40 per cent, giving the state about the same crop as last year.

The Manitoba Grain Growers' Association estimates the wheat yield of Western Canada to be 107,000,000 bushels.

Corn in central and southern Iowa which had been severely burned was further damaged during September by heavy rains.

The corn condition for September in Missouri is placed at 66; August, 88; one year ago, 72, when the crop was 182,000,000 bushels.

Corn in northwestern Missouri and northeastern Kansas has been irreparably damaged by drought. Recent rains came too late to save the corn.

The best oat crop in recent years has been harvested in Ohio this season. The corn crop also is excellent, being estimated at 145,000,000 bushels.

Owing to the fact that plowing is a month late this fall, it is believed that the wheat acreage of Kansas will be considerably diminished next year.

Owing to drought, the crops of Pennsylvania are this year below the average, with the exception of the oat crop. The oat crop is rated at 97, as against 86 for last year.

According to the estimate of members of the Texas Grain Dealers' Association, recently in session at Ft. Worth, the corn crop of Texas will this year be less than fifty per cent of a normal yield.

George H. Phillips from personal observation and the reports of 5,000 correspondents cuts down the Government's August estimate of the corn crop 537,000,000 bushels. This reduction represents Mr. Phillips' estimate of the damage done by drought in the eight surplus states.

W. Snow's regular September report shows a corn condition of 79.7, as against 85.9 in August, and 79.4 last year. Only the crops of 1894 and 1901 in the last fifteen years have shown a lower condition. The shortage is attributed to drought and high temperature in Illinois and the Southwest.

Excessive heat, high winds and inadequate rainfall have reduced the condition of the corn crop in Oklahoma. Sufficient moisture appears to be in the soil, but extreme heat seems to have killed the pollen, thus preventing fertilization. The condition is placed at 55, as against 78 a year ago.

The State Board of Agriculture of Illinois estimates the wheat yield of the state at 20,533,822 bushels. The wheat crop area is 1,154,404 acres, all but 81,052 being winter wheat. The oat acreage is placed at 2,760,426, and the yield at 98,423,669 bushels; winter rye, 54,138 acres, and the yield 1,098,605 bushels.

A half million acres has been added to the corn area of Illinois this year, making a total of 7,296,689 acres. The August 1 condition was 93 per cent, 14 points better than the August 1 condition last year. Corn is said to have been fired in some sections of the state, though on the whole, a large crop will be harvested.

The annual estimate of the crop of the Canadian west, based on the reports of ten special crop inspectors, shows the largest crop in the history of that section. The total wheat crop of the three prairie provinces is estimated at 118,279,000 bushels; the oat crop at 163,998,000 bushels; the barley crop at 30,542,000 bushels.

Estimates of the crops of the three states of Washington, Idaho and Oregon place the yield as follows: Wheat, 65,000,000; oats, 25,000,000; barley, 15,000,000. Washington's wheat acreage is 2,122,000 acres, as against 1,728,748 last year, when 23,500,000 bushels were harvested. Oregon has 862,000 acres in wheat this year.

Director Geo. M. Chappel, of the Iowa Weather and Crop Service, announces that only a part of the Iowa corn crop has withstood the drought. Late corn has been badly fired, and will not mature. Slight frosts in the northern part of the state are not believed to have wrought appreciable damage to the corn crop. The estimated yield for this year is 302,000,000 bushels.

In the Michigan Crop Reporter the corn condition is placed at 86, as against 78 a year ago. The government August condition (85) indicated 60,000,000 bushels, the same as a year ago. The wheat yield is placed at 18 bushels per acre, the same as a year ago, when 15,000,000 bushels were produced; quality, 95. The oats yield is 29 bushels, the same as a year ago, when the yield was 40,000,000 bushels; quality, 92. The rye crop is about equal to that of a year ago, when the production was 5,300,000 bushels. The corn condition is 86.

The September Crop Report indicates the average condition of corn on September 1 as 74.6, compared with 84.4 last month, 79.4 on September 1, 1908, and 80.6, the average of September for the



past ten years. Comparisons for important corn states are as follows:

| States.        | Per cent<br>Acreage<br>in state. | Condition.        |                   |                       |
|----------------|----------------------------------|-------------------|-------------------|-----------------------|
|                |                                  | Sept. 1,<br>1909. | Sept. 1,<br>1908. | Ten-year<br>Sept. av. |
| Illinois       | 9.4                              | 84                | 75                | 83                    |
| Iowa           | 8.6                              | 79                | 80                | 82                    |
| Texas          | 7.6                              | 55                | 85                | 74                    |
| Missouri       | 7.5                              | 68                | 72                | 79                    |
| Nebraska       | 7.3                              | 68                | 82                | 80                    |
| Kansas         | 7.2                              | 57                | 72                | 72                    |
| Oklahoma       | 5.4                              | 47                | 78                | 78                    |
| Indiana        | 4.5                              | 91                | 69                | 74                    |
| Georgia        | 4.1                              | 88                | 84                | 84                    |
| Ohio           | 3.5                              | 87                | 82                | 83                    |
| Kentucky       | 3.3                              | 83                | 80                | 83                    |
| Tennessee      | 3.1                              | 73                | 84                | 81                    |
| Alabama        | 3.0                              | 76                | 84                | 82                    |
| North Carolina | 2.7                              | 79                | 84                | 83                    |
| Arkansas       | 2.7                              | 65                | 80                | 78                    |
| Mississippi    | 2.6                              | 69                | 87                | 78                    |
| Louisiana      | 2.0                              | 87                | 86                | 80                    |
| South Carolina | 2.0                              | 82                | 81                | 78                    |
| South Dakota   | 1.9                              | 90                | 88                | 83                    |
| Virginia       | 1.9                              | 75                | 89                | 87                    |
| United States  | 100.0                            | 74.6              | 79.4              | 80.6                  |

The average condition of spring wheat when harvested was 8.6, as compared with 91.6 last month, 77.6 when harvested in 1908, and the ten year average at harvest of 76.9. The average condition of barley when harvested was 80.5, against 85.4 last month, 81.2 when harvested in 1898, and the ten year average of 83.7. The average condition of oats when harvested was 83.8, as compared with 69.7 last year, and 79.8 the ten year average. Comparisons of important oats states are as follows:

| States.       | Per cent<br>Acreage<br>in state. | Condition.        |                   |                       |
|---------------|----------------------------------|-------------------|-------------------|-----------------------|
|               |                                  | Sept. 1,<br>1909. | Sept. 1,<br>1908. | Ten-year<br>Sept. av. |
| Illinois      | 13.4                             | 90                | 55                | 78                    |
| Iowa          | 13.0                             | 80                | 65                | 79                    |
| Minnesota     | 8.4                              | 91                | 65                | 82                    |
| Nebraska      | 7.6                              | 74                | 69                | 74                    |
| Wisconsin     | 7.0                              | 74                | 83                | 85                    |
| Indiana       | 5.6                              | 83                | 56                | 79                    |
| Ohio          | 5.0                              | 84                | 65                | 84                    |
| North Dakota  | 4.6                              | 88                | 72                | 80                    |
| South Dakota  | 4.3                              | 87                | 75                | 87                    |
| Michigan      | 4.1                              | 78                | 82                | 85                    |
| New York      | 4.0                              | 78                | 86                | 88                    |
| Pennsylvania  | 3.1                              | 76                | 81                | 84                    |
| Kansas        | 3.0                              | 83                | 68                | 66                    |
| United States | 100.0                            | 83.8              | 69.7              | 79.8                  |

The preliminary estimate of the area of rye harvested is 0.5 per cent less than last year. The preliminary estimate of yield per acre is 16.0 bushels, against 16.4 bushels last year, 16.4 bushels in 1907, and a ten year average of 15.8. The indicated total production is 31,066,000, against 31,851,000 finally estimated in 1908, and 31,566,000 in 1907. The quality of the crop is 92.9, against 92.7 last year. The average condition of buckwheat on September 1 was 81.1, against 86.3 last month, 87.8 on September 1, 1908, 77.4 in 1907, and a ten year average on September 1 of 86.4. The average condition of flaxseed on September 1 was 88.9, against 92.7 last month, 82.5 on September 1, 1908, 85.4 in 1907, and a six year average on September 1 of 86.2. The preliminary estimate of the yield per acre of hay is 1.41 tons, as compared with 1.52, as finally estimated in 1908, 1.45 tons in 1907, and a ten year average of 1.43 tons. A total production of 64,166,000 tons is thus indicated, as compared with 70,798,000 finally estimated in 1908. The average quality is 93.0, against 94.5 last year.

### ORGANIZING OKLAHOMA FARMERS.

B. F. Yoakum, chairman of the executive committee of the Rock Island System, at Shawnee, Okla., on August 17, in an address to the Farmers' Union of Oklahoma, pledged the Rock Island System to aid the farmers in erecting grain and cotton storehouses, and recommended their going more actively into politics.

The Union's officers are trying to establish local stations to be operated by them from Galveston on the "Galveston plan," that is, Galveston receivers and handlers furnishing the money.

The Farmers' Union Elevator at Cimarron, Kan., has been sold to the Cimarron Grain Co.

The committee of the Farmers' Elevator Co. at Mapleton, Minn., appointed to enquire into the advisability of re-opening the elevator, reported to the board of directors recommending that the elevator be sold. Bids for the house will be opened September 18.

The elevator and coal sheds of the Farmers' Elevator Co. at Hatfield, Minn., were sold on August 17 at auction. The elevator is a cribbed house with a large flat-house connected therewith, has two dumps and a driveway and an 8-horsepower gasoline engine, new scales and office building and is in a good grain territory.

On August 20, after other commission men had voted to handle grain for nothing, the directors of the Grain Growers' Association fixed the commission for this season's handling of wheat on the Winnipeg Exchange at 1 cent, barley at  $\frac{3}{4}$  of a cent and oats at  $\frac{1}{2}$  cent a bushel. This action was the outcome of a referendum taken of the 5,000 shareholders of the company. Out of 2,000 replies, 90 per cent favored the commission.

## FIRES-CASUALTIES

A tornado destroyed two elevators at Hillsboro, N. D.

Lightning partially destroyed the elevator at Bird's Island, Minn., recently.

High winds wrecked the Cummings elevator at Grand Forks, N. D., recently.

The grain elevator and warehouse at Fair Oaks, N. Y., burned down on August 15.

Three warehouses and a grain elevator were burned at Krupp, Wash., on August 25.

The Cisco Grain Co., of Cisco, Ill., report a damage to their elevator at that place by lightning.

The elevator of the Southern Grain Co. at Cincinnati, Ohio, was burned down on Sept. 1.

The Cargill elevator at Colfax, N. D., was damaged by fire from lightning on August 25.

Arnold's 30,000-bushel elevator and one car of grain at Shoal Lake, Man., burned recently.

A wind storm damaged the new elevator at Reeves Spur, N. D., near Jamestown, recently.

Lightning destroyed the elevator at Fessenden, N. D., belonging to the C. G. Ivey Elevator Co., on the 23.

The coal shed connected with the Acme Grain Co. elevator at Beresford, N. D., was burned down August 25.

The Amenia elevator at Rolette, N. D., was set afire by lightning recently, but prompt action prevented great damage.

The British North American Elevator Co.'s elevator at Ashville, Man., burned down from lightning. The loss is \$8,000.

The warehouse of James L. Higgins at Bridgeport, Ohio, filled with wheat was recently burned. Firebugs are charged with this fire.

The C. P. Dodd & Co. Elevator at Louisville, Ky., recently burned down, causing a loss of \$12,000; which was fully covered by insurance.

A grain warehouse 200x30 feet at Tulare, Cal., collapsed recently, causing the death of a Mexican, and the serious injury of another man.

The grain elevator of W. A. Holstein at Oconomowoc, Wis., was damaged by fire on August 30. The origin of the fire has not been ascertained.

The Waterloo Warehouse, owned by the Puget Sound Warehouse Co., recently sustained damages by fire. The loss was covered by insurance.

A lightning stroke almost totally destroyed the Longmont Elevator at Lafayette, Colo. The building was badly shattered, but was not burned.

The Crown Elevator at Raymond, Minn., was slightly damaged by lightning, recently. The blaze was extinguished before great damage was done.

Tramps started a fire which destroyed the Puget Sound Warehouse Co.'s warehouse at Waterloo, Wash., on August 20. There was no grain in the house.

Fire, originating in the old warehouse of the Spokane Grain Co., Western Avenue, Seattle, Wash., destroyed a whole block of frame and corrugated iron buildings.

Lightning struck the elevator at Hennepin, Ill., which was destroyed. It contained 12,000 bushels of oats, corn, barley and rye. The loss is largely covered by insurance.

Fire gutted the new alfalfa mill at Minneapolis, Kan., on August 13. This plant was put out of business by fire in March, and a larger plant was built at a cost of \$25,000.

A spark from a Big Four engine is supposed to have started the fire which damaged the grain elevator at Ogden, Ill., on Aug. 28. The damage is estimated at \$200 to \$300.

The Chandler Elevator, at Mountain Park, Okla., burned down August 28, together with a car of wheat on the siding. The loss on building is \$2,000, with \$1,200 insurance. The wheat in the car, valued at \$1,300, is a total loss.

Fire destroyed the Great Western Elevator at Binford, N. D., recently. Tramps are said to have started the fire under the driveway. Only 300 bushels of grain were in the house.

Lightning ignited the large alfalfa shed of N. L. Chindberg, near Lindsborg, Kan. It was burned together with 15 tons of alfalfa. There was only \$50 insurance on the shed, and \$100 on the contents.

Fire of unknown origin burned down the Winders & Berg elevator at Arcadia, Ind., on August 17. There was \$1,400 worth of grain in the building covered by \$1,000 insurance. The building was insured at \$12,000.

Fire, thought to have been started by electric light wires, swept August Ferger & Co.'s elevator, at Hopkins Street and President Place, Cincinnati, at 2:30 a. m. on September 2. The elevator contained 75,000 bushels of wheat. The damage on the

building is estimated at \$5,000 and on the contents at \$25,000, all of which was covered by insurance.

The giving way of a wall of the Masseq Milling Co.'s elevator at Bowling Green, Ky., which stands by the river bank, precipitated into Drake's creek 2,000 to 3,000 bushels of wheat.

Pat Dougherty, of the grain firm of Gould & Dougherty, Monterey, Cal., sustained an injury of his ankle recently, caused by a bale of hay which fell from the car while being unloaded.

Sparks from an engine caused the destruction by fire of warehouses at Krupp, Wash., belonging to the Everett Grain & Warehouse Co. of Everett, and the Seattle Grain Co., of Seattle, on August 25. No grain was in either building.

The Dillon elevator at North Lewisburg, Ohio, was destroyed by fire on August 16, entailing a loss of \$5,000 on the building, and more than that on the contents. The insurance on the building was \$3,000. The origin of the fire is unknown.

Fire originating in a box car, presumably started by tramps, burned a grain warehouse five miles west of Walla Walla, Wash., on August 20, completely destroying it, together with 3242 sacks of grain, causing a loss of \$8,000, which was fully covered by insurance.

### A WISE DRIVER.

A wise horse usually has a wise master. An old horse in good condition must have one, surely, for city life is hard on horse flesh if the country is not, and few animals once in the city last many years. Jack Quinlan of Cleveland says it's because horses don't worry as men do. Because Quinlan has been driving horses for the Union Elevator Company for thirty-three years he ought to know something about the "nobles of beasts"; and that he is a wise and good master must be inferred by those of us who don't know him personally, since we are told that he has been holding the reins over the same team he is driving today for more than twenty years and they are in tip-top condition, too.

"A horse takes it just as easily and pulls along just as nicely when he has a load of 100 bushels of oats as when he has 50. Now you'll find that some men worry more when they have got a heavier load, but not so with horses. They know it won't do any good to worry and they don't. And a horse also understands how to step aside from the holes and bad places on the road, but there are a lot of men who do not."

Jack didn't find it necessary to "fix them up for Labor Day." His team "are always fixed up and ready." Then he told how and why they were "always ready." This is the how and the why, in Jack's own words:

"Brush and curry the horses every morning and evening.

"Use the hose on them every other morning in summer, if necessary.

"On Sunday give them and their stable a thorough overhauling.

"Feed them carefully; don't overfeed, but give them enough.

"It's not necessary to use the whip. If they know your voice, they'll obey that quick enough.

"Care for your horses as you would for your children."

These are the rules, Jack says, which count for the fact that despite twenty years of the hardest sort of work, his horses are still able to enter an exhibition. Every day in "close onto twenty years," as Jack says, except Sundays, old "Bull" and "Tom" have pulled almost 7,000 pounds a load.

### ALFALFA FAILS IN MAINE.

The Maine Agricultural Experiment Station began experimenting with alfalfa in 1903, but has not been able to obtain a permanent stand, either at the Station farm or upon any of the co-operating farms. On the farm of John Watson at Houlton, the plant did pretty well in 1906-07, giving three cuttings in 1907; but in the winter of 1907-08 there was an unusual amount of ice, with the result, says Bulletin 167, that "the alfalfa was entirely smothered out and in the spring of 1908 there was only a few plants alive on the field." The Station has made no further experiments in the growing of alfalfa in that state except in an entirely experimental way.

After a conference of representatives of the Grain Growers' Association and Premier Scott of Saskatchewan, it was announced that "probably" the government would undertake the scheme of taking over and operating the grain elevators of the province if it could secure a monopoly, but the power is not vested in the province. The farmers on the other hand would not agree to a monopoly, but maintained that by reason of handling the grain at cost the government would virtually have a monopoly of the business, shutting out the other grain dealers by close competition.



## TRANSPORTATION

The Montreal Harbor Commissioners have fixed switching charges to Elevator No. 1 at \$2.50 per car.

Lake charters for grain have been made for sailings in October at 2c. for wheat Duluth to Buffalo.

A British ship recently reached Boston having on board over 600 tons of birdseed from Buenos Ayres.

The Boston & Maine has given notice that, effective September 6, ear corn for export at Boston will be held free for fifteen days after arrival; thereafter a charge of 25c. per car or part thereof per day will be made until loaded on steamer, Sundays and holidays included.

The reduced rate of 5c. per cwt. on wheat and corn for export to Galveston, which was ordered by the Kansas Board of Railroad Commissioners two years ago and which expired by limitation on September 1, will be continued. The rate on export corn to Galveston is 22c. and on wheat 25c. from Wichita.

A conference at the invitation of the representatives of the Trunk Lines was held in New York with representatives of the grain exchanges of Philadelphia, Baltimore, Boston and New York to consider the matter of the \$2 diversion charge on Western grain shipments. At this conference a committee was appointed to investigate the situation and to make report on September 29.

Under a ruling by the Commerce Commission, all reparation claims pending between shippers and carriers must be disposed of as quickly as possible, and the Commission will assist them in this, so that by September 1 nothing will be left unsettled. After that date the Commission will not award reparation claims either on formal or special docket in any case where carriers have reduced the rates simply to meet a lower rate of a competing line.

The new all-rail rate on grain out of Omaha and Kansas City to Tampa and Jacksonville, a reduction of 3 cents over the tariffs of the New Orleans combination to the same points, will probably be protested by the steamship lines operating to these ports from New Orleans; as the effect of the new rate will be to take the Tampa business out of the New Orleans territory and to route it by way of St. Louis, Louisville and Memphis, and putting Tampa on a parity with Jacksonville, thus making the through grain rate 3 cents less than the charges of the New Orleans combination by rail and water.

On August 3d a decision of the Wisconsin Railway Commission was handed down as the result of a complaint brought by the Milwaukee Chamber of Commerce through its Freight Bureau against the C., B. & Q. and C. M. & St. P. railway companies. The Railroad Commission ordered that these two railway companies establish joint rates on all grains from all stations on the C., B. & Q. Railway of not to exceed 12½c. per 100 pounds. These companies had refused to establish joint rates, and it was shown by the evidence that the rate from some stations on the C., B. & Q. Railway was as high as 17c. per 100 pounds.

Effective October 1, 1909, the Western Trunk Line Committee will put into effect a ruling covering the "natural shrinkage" of grain in transit, which should be deducted when filing claims for loss in transit. The amount to be deducted on wheat, flaxseed, rye, oats and barley will be ¼ of 1% and on corn ¼ of 1%. Sec'y E. J. Smiley of the Kansas Association advises his membership that—"We would suggest that you inform the railroad company, through your agent, that until they can show that there is a natural shrinkage in grain you do not propose to deduct anything from the amount of your claim, and that claims will be filed for the full amount."

New York grain exporters are pleading for a reduction of the Buffalo-New York rate from 5½c. to 4½c. to meet the Montreal competition which is now taking the business. They have other complaints to make against the railroads. Only ¼ of 1 per cent is allowed for weight losses, but when there is an overage a bill is sent. The elevator insurance rate at New York is 33½ per cent higher than in Montreal. "Even with all of our other disadvantages," said a prominent shipper, "if the railroads would give us a 4½ cent rate on wheat from Buffalo this fall we would do the biggest export business in the history of the port. Europe needs and must have our wheat."

The Rock Island has filed a tariff, effective on September 13, that provides for the payment of a transfer allowance to elevator men of ½ cent a bushel on wheat, corn, rye, oats and barley shipped to the East via lake boats. The allowance provision was put in at the request of the transportation department of the Board of Trade to meet the competition of the Chicago, Milwaukee & St. Paul at Milwaukee, and to promote the movement of grain through the Chicago market. The allowance amounts to from \$5 to \$7.50 a car on grain shipped

through the elevators having facilities for the transfer to the boats from the railroad and is only available to some twenty shippers who own elevators. Scores of smaller shippers are protesting against the alleged discrimination, and the Eastern railroads are aroused because of the added competition with the lake lines thus created. Other Western roads hesitate to meet the Rock Island tariff, but the Alton and Santa Fe make a similar allowance.

### CAR SHORTAGE NEAR AT HAND.

The railroads have begun to admit the threatening approach of a car famine. In the Northwest already the elevators are said to have more grain in store than cars to move it. The Secretary of the American Railway Association car service has said that if the reduction in idle cars continues at the present pace there will be a car famine in October. The Pennsylvania, fortified as it is with a large amount of rolling stock, already finds itself in a position where it has become a serious problem to provide enough equipment to handle the freight originating in and around Pittsburgh. E. W. McKenna of the St. Paul when asked about the prospect of a car shortage, said: "I can give you a better answer about October 10, but it is my impression that cars will be pretty scarce, owing to the fact that the shippers and receivers are not making the same preparations for the proper handling of the grain that the railroads are, and they probably will as usual want all their cars in a bunch."

Other railway men speak in somewhat the same way, except that as a rule they "don't expect anything serious."

### MISSOURI RIVER RATE CASE.

The deep significance of the decision of the U. S. Circuit Court in the so-called "Missouri River Rate Case" is that the court negatives the Commerce Commissioner's attempt to "make rates."

"The question raised," said Judge P. S. Grosscup, in rendering the opinion, "in its larger aspects is not so much a question between the shippers and the railroads as between the commercial and manufacturing interests of Denver and of the territory east of the Mississippi River on the one side, and the commercial and manufacturing interests of the Missouri River cities on the other."

Besides granting the permanent injunction the court also granted a preliminary injunction in the "Denver Rate Case," which is based on similar principles as the "Missouri River Case." The Denver case, involving shipments to Denver instead of Missouri River points, is still pending final decision on a demurrer filed by the Interstate Commerce Commission to the bill of the complaining railroads.

The railroads in the "Missouri River Case" sought to have the Commerce Commission enjoined permanently from enforcing an order of the Commission made on June 24, 1908, relating to joint rates from the Atlantic seaboard to Missouri River cities and in this they have by this decision succeeded. This order now set aside sought to create a system of through rates from the Atlantic Seaboard to the Missouri River that were a reduction from the sums of the local rates. This, according to Western roads, threw the burden upon them. The decision, if sustained by the U. S. Supreme Court, to which the case will be appealed, will, it is said, limit the power of the Commerce Commission to the settlement of cases of rate discrimination.

In the present case the railroads maintain that the principle laid down by the Commerce Commission would be proper if applied to but one road, but that its application to more than one would work a hardship, because of the expense of operation of terminals by each road. The railroads also contended that the reductions ordered by the Commission meant discrimination against Western manufacturers and merchants in favor of the Atlantic seaboard shippers. Speaking of the power of the Commission, the opinion says:

"We are not prepared to say the Commission has not the power to enter upon a plan looking toward a system of rates wherein the rates for longer and shorter hauls will taper downward according to distance, providing such tapering is both comprehensively and symmetrically applied—applied with a design of carrying out what may be the economic fact, that, on the whole, it is worth something less per mile to carry freight long distances than shorter distances. But it does not follow that power of that character includes power, by the use of differentials, to artificially divide the country into trade zones tributary to given trade and manufacturing centers, the Commission, in such cases, having as a result to predetermine what the trade and manufacturing centres shall be; for such power, vaster than any one body of men has heretofore exercised, though wisely exerted in specific instances, would be putting into the hands of the Commission the general power of life and death over every trade and manufacturing centre in the United States."

The opinion holds that the Commission, in attempting to enforce its order, sought to exercise this colossal power.

It states that much testimony was heard from various sections of the country to show the effect the proposed new rate would have. "But in the

case here," Judge Grosscup continued, "the question involved is not a question of fact, but a question of power—the question is not whether, by the application of correct principles, a given rate has been decided by the Commission to be unreasonable, but whether the principles applied are themselves within the power of the Commission; for Congress did not intend to confer upon the Commission power to do by indirection what it could not directly do—did not intend to include within the word 'reasonable' every power over the trade and manufacturing of the country that the Commission should determine it was reasonable that it (the Commission) should possess."

"Again, it is urged that, though the effect of the order in the Missouri River rate case is to discriminate in favor of the Atlantic seaboard and the Missouri River cities against the Central Traffic Territory, and in the Denver case in favor of Denver and the east-Mississippi River country against the Missouri River cities, the discrimination is not 'undue' within the meaning of the interstate commerce act; and that therefore the courts have no power to enjoin. The difficulty with this argument is that it draws no distinction between the power that the Commission is actually given and a power that the Commission is usurping."

Judge Grosscup's opinion concludes: "It must be understood, however, that these orders of the Commission are enjoined solely because, in our judgment, they lay upon the commerce and manufacturing of the localities affected an artificial hand that Congress never intended should be put forth, and therefore are outside the power conferred upon the Commission by Congress; for with the question of a reduction in rate, or a readjustment of rates, from which such artificial results have been eliminated, we are not now dealing."

### MILLING-IN-TRANSIT RATES.

Following is the opinion (No. 1,051; file No. 933, decided June 28, 1909) of the Interstate Commerce Commission on the rehearing of the matter of milling-in-transit rates.

*Syllabus.*—The Commission adheres to its former ruling in a proceeding entitled *In the Matter of Through Routes and Through Rates*, 12 I. C. C. Rep., 163, that whenever by any transit arrangement through rates are applied, such through rates must be as of the date of the first movement of the shipment from the point of origin under such through rates.

*Report of the Commission.*—LANE, Commissioner: Transit privileges are allowed by carriers at many points by which commodities milled or merchandised at such points are treated as constructively in course of transportation while in the hands of the owners or millers. The object of this arrangement is to enable the shippers to receive the benefit of the through rates from the point of origin of such commodities to the final point of destination instead of requiring them to pay the rate to the milling or merchandising point, plus the rate from such point; the sum of such rates being generally in excess of the through rate from first point of origin to point of final destination.

Rates frequently change while commodities are in a state of suspended transportation at the transit point. In such case it is necessary to determine whether or not the rate to be applied shall be that of the day of final shipment or that of the day of shipment from the first point of origin.

This question has been heretofore examined by the Commission, and was decided on May 29, 1907, in the proceeding known as *In the Matter of Through Routes and Through Rates*, 12 I. C. C. Rep., 163. In that proceeding, after an examination of the authorities, it was held that the rates to be charged for the transportation are the rates in effect at the time the shipment is first delivered to the carrier. Changes in rates do not affect shipments which are in course of transportation. Shippers delivering commodities to carriers are not subject to changes of rates by the carriers after the carriers take possession of the shipments and issue bills of lading.

Subsequently an administrative ruling covering this point was issued by the Commission in its Conference Rulings Bulletin No. 3, page 31, as follows:

"119. Reshipping of grain. Upon inquiry whether a proposed tariff rule providing that 'the rate to be applied on all outbound transit grain of record shall be the specific rate that is lawfully in effect from Chicago at the time the grain is reshipped' may lawfully be incorporated in a tariff; *Held*, That the Commission can not sanction the rule, and that the grain can move only as a through movement on the through rate in effect at the time it starts, or as a local movement."

The Commission is asked by a committee representing the grain and flour interests of various cities on the Ohio River to rescind this ruling and to hold that the through rates as of the date of the second or final movement of the commodities may be applied to shipments which are the subject of transit regulation. The argument made is thoughtful and has received full consideration. Some difficulties following the Commission's ruling are indicated by the committee. These difficulties, however,



appear to be incidental to the transit practice rather than to the ruling which the Commission has made. Equally great difficulties of the same general nature, it can plainly be seen, would follow the ruling requested by the committee.

The committee says that upon delivery of shipments at the transit point it remains to the receiver to determine whether or not the shipments shall be a through shipment, its language being:

"If sold locally, no milling-in-transit feature is involved. If sold for delivery at some other point, and there tendered the carrier for shipment to said other point, it then becomes a through shipment of product and cannot become so earlier. Therefore the through product rate in effect on the day of its shipment from the mill should be applied, because on that day, and not sooner, has it become a through shipment to its final destination."

To accept this argument of the committee would be to condemn the entire transit arrangement and to hold that the rates should be the local rates to and from the transit point. Why should there be a "milling-in-transit" point if there is not through transportation? And if there is through transportation, the through rate from point of origin must apply. "Transit" implies a through movement.

The Commission is unable to accept or countenance the theory of suspended transportation, with its result of the application of the through rate for commodities which have been milled or merchandised, without applying to the situation thus created the rule of law that rates cannot be changed while shipments are in course of transportation. The Commission can not say that shipments are theoretically in course of transportation in order that the through rate may be applied, and actually not in course of transportation in order that changed rates may be applied.

The Commission adheres to its former ruling that whenever by any transit arrangement through rates are applied, such through rates must be as of the date of the first movement of the shipment from the point of origin under such through rates.

#### COMMERCE COMMISSION DECISIONS.

In the case of *Beckman Lumber Co. v. Kansas City Southern Ry. Co. et al.* (No. 1940; opinion No. 1046; June 22, 1909), the Commission say a reconsignment charge of \$5 was excessive where, as in this case, only the name of the consignee, not the destination of the car was changed. The Commission in the opinion say:

"In the ordinary acceptance of the term, a reconsignment refers to a change in destination, accompanied or not by a change in the name of the consignee, rather than to a mere change in the name of the consignee; but the latter change is recognized by our conference ruling No. 72 as a reconsignment and the defendants are therefore justified in putting that interpretation upon their tariff. It does not follow, however, that carriers should impose the same charge for every reconsignment. The conference ruling correctly states the case. The privilege of reconsignment is a thing of value to the shipper and of expense to the carrier; therefore a charge may be made; but the value and extent of that service vary and the charge should be in proportion to the service. In this case it is unreasonable to exact \$5 for simply changing the name of this consignee. In *Cedar Hill Coal and Coke Co. v. C. & S. Ry. Co.*, 15 I. C. Rep., 546, it was held that \$5 was an unreasonable charge for the reconsignment of carloads of coal, although a change in destination and an additional movement was involved, \$2 being held sufficient. A mere change in consignee must often involve additional clerical work and perhaps additional responsibility, and we have concluded to allow \$1.

"We find that the complainant has been compelled to pay \$4 in excess of a reasonable charge, for which an order of reparation, with interest, will be allowed; and we further find that \$1 will be a reasonable charge to be made for this service in the future; and it will be so ordered."

#### TRACK-STORAGE CHARGE.

*F. M. Turnbull Co. v. Erie R. R. Co.* (No. 2051, opinion No. 1053; June 22, 1909), was a petition for reparation of charges for track storage of oats. The Turnbull Co. is a corporation handling grain and hay in New York at the defendant's yards at Twenty-eighth Street, Manhattan, and objected to the demurrage charge of \$1 and \$2 per day for track storage. The reasonableness of track storage charges having been sustained by the Commission (*N. Y. Hay Exchange Ass. v. Pa. R. R. Co.*, 14 I. C. Rep. 178), the only question in this case was the reasonableness of a rate applied to hay when applied to oats, the complainant denying such reasonableness because the two commodities are handled differently—hay in bales and oats in bulk, hay being sold after and oats before arrival at the delivery track. Oats are bagged and weighed in the car after arrival, a car averaging 606 bags, each weighed separately.

The facts in the case are stated in the opinion as follows:

"Complainant sells in carload lots to jobbers, who in turn sell to consumers in carload and less-than-

carload lots. The unloading is performed by complainant and the trucking to consumers by the jobbers. Complainant takes on the average about three days to unload cars, this depending entirely upon the number of trucks operated by the jobber and upon the distance the oats have to be carted. Under the most favorable conditions a carload of oats can be unloaded in six hours. The jobber is given three days to load and cart away the oats and after that time, it is asserted, he is charged with car service by the defendant at the rate of \$1 per day. While complainant performs the unloading service, nevertheless it is paid for by the jobber.

"Sellers of track-storage grain compete with elevators from which grain can be taken without track-storage charges being assessed. It is alleged, however, that better grain can be purchased from the track than from the elevator on account of the mixture of the grain in the elevator. As before stated, the time it takes to unload a car of oats is governed largely by the number of trucks employed, and the jobber, rather than the actual shipper, uses the car as a warehouse. Complainant gives the jobber seventy-two hours to take the oats away, while the carrier gives complainant only forty-eight hours, and complainant contends that if he charges the jobber anything for track storage it tends to divert his business to the elevator.

"One of the principal reasons urged by the hay dealers in charging that the track-storage charges were unreasonable was that they billed their shipments "lighterage free" (which means that shipments are billed to the New Jersey terminals and there reconsigned to whatever yards desired in Manhattan Borough), and that they were compelled to consume some of the free time at the Jersey City terminal. As above indicated, complainant ships almost entirely direct to the yards of the defendant at Twenty-eighth Street, and the oats are sold before they arrive at that destination."

On this state of facts the charges (\$1 per car after two days and \$2 a day thereafter) are found to be not unreasonable.

#### GRAIN ELEVATOR PRIVILEGE AT LITTLE ROCK.

In *Brook-Rauch Mill and Elevator Co. v. Mo. Pac. Ry. Co. et al.*, the Commission again discusses the relations of the Missouri Pacific and one T. H. Bunch, or the T. H. Bunch Co., recently heavily fined for accepting rebates from the defendant company. The Brook-Rauch Milling Co. complained to the Commission that because Bunch had free use of a cornmeal mill and elevator built by the railroad and leased at \$1 per year to Bunch it was discriminated against. The Commission finds that Bunch does indeed enjoy such a "snap" at Argenta (a suburb of Little Rock), and makes order that the arrangement be discontinued as unlawful. "We find," say the Commission, "that the arrangement between the defendants and the Bunch interests at Argenta from the beginning has actually worked a preference on the one hand and a gross discrimination on the other. Bunch, as a dealer in and shipper of grain, has received an immense advantage as the result of having the free use of a modern mill and a large elevator, fully equipped. He has been able to conduct a large business on a small capital, having no considerable amount invested in his plant; and his opportunity to make money in the handling of grain has been so much greater than that of any other dealer in Little Rock that he is almost able to monopolize the business.

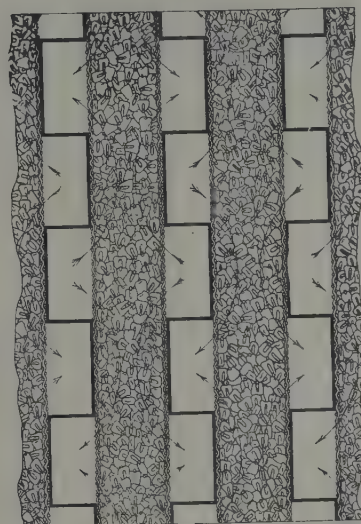
"On the part of the defendants it is contended that a bona fide effort is being made to oust Bunch and to cancel the arrangement, an action of ejectment having been brought in the state court shortly after the filing of the complaint herein. Whether such a proceeding is an appropriate one or is being conducted in good faith we are not called upon to say. The sole question for us to determine is whether the arrangement results in an unlawful preference in favor of Bunch and an unjust discrimination against other grain dealers. Neither in the testimony offered on behalf of the defendants nor in their printed argument do we observe anything that justifies their course of action in this matter or that legally sanctions their relations with Bunch; and on the whole record we find that the arrangement results in an undue preference on the one hand and an unjust discrimination on the other. The contract upon which Bunch rests his right to the free use of the railroad's facilities or property has been discriminatory from the beginning. The act to regulate commerce as it was in force at the time the undertaking was entered into prohibited all unjust discriminations. The agreement therefore was unlawful and void *ab initio*. The general principles underlying our decision in *Eichenberg v. Southern Pacific Co.*, 14 I. C. Rep., 250, are equally applicable here. That one shipper may not enjoy at the hands of a carrier advantages that are denied to other shippers is a principle asserted in the act throughout its various provisions, and has been consistently enforced by us in numerous reported cases that are familiar to all and therefore need not be cited here.

"An order will be entered requiring the defendants to cease and desist from the continued performance of their contract with Bunch and the practices herein found to be unlawful."

## THREE FACTS

about the

## ELLIS GRAIN DRIER



### The Ellis Principle

¶ The grain is held in a PERFECTLY EVEN LAYER ONLY 2½ INCHES THICK. A 100-bushel dryer presents a drying surface of 1260 square feet.

¶ The air currents enter the grain layer from BOTH SIDES, forming an air cushion, and then pass both upwards and downwards; thus uniform drying is assured.

¶ EACH BUSHEL of grain is subjected to 260 cubic feet of air per minute.

¶ The ELLIS PRINCIPLE has made possible the ONLY commercially successful COLD AIR DRIER on the market.

Write us for a booklet.

## Ellis Drier Co.

Postal Telegraph Bldg.

CHICAGO



## PERSONAL

N. Huffman has resigned as manager of the elevator at Sibley, Ill.

Morton W. Smith has assumed the management of a terminal elevator at Minneapolis.

G. W. Jeska will be retained as buyer by the new owners of the elevator at Swea City, Iowa.

Charles Quackenbusch has been appointed manager of the Cargill Grain Co. at Green Bay, Wis.

J. A. Dordge will be retained as manager of the Moore Bros. & Co. elevator at Corinth, Iowa, under the new ownership.

F. W. Bowman has resigned the position of buyer at the Powers Elevator at Brinsmade, N. D. He is succeeded by John Adams.

J. L. Neil of Colfax, Wash., is agent for H. M. Houser and W. D. Henry, who recently opened a grain office at Pullman, Wash.

E. D. Malden, manager for the Imperial Elevator Co. of Minneapolis at Rugby, N. D., has been promoted to the position of traveling auditor.

John A. Johnson has resigned his position as manager of the farmers' elevator at Hancock, Minn., to enter the employ of a commission company.

O. A. Stondahl, formerly in charge of the farmers' elevator at Zumbrota, Minn., has been placed in charge of the Red Wing Malting Co.'s elevator, same place.

J. A. Hoeffel has become a member of the Chicago Grain Co., at Madison, Wis., of which W. J. Buttschan is manager. Mr. Hoeffel will travel for the company.

M. B. O'Halloran of Austin, Minn., at a recent meeting of the directors of the Hunting Elevator Co. at McGregor, Iowa, was placed in charge of the company's business in Iowa and Minnesota.

F. E. Hawley, for years agent at Pullman for the Pacific Coast Elevator Co., and now a buyer for Albers Brothers Milling Co. of Seattle, is at Pullman. His firm plans to buy almost exclusively from the producers.

A. M. Scott and F. S. Ratcliff of Colfax, Wash., have dissolved partnership and will each do an independent business in the future. Mr. Scott will buy for the W. A. Gordon Co. of Portland and San Francisco, mill buyers, and A. Berg of Portland, exporter, while Mr. Ratcliff will buy for the Ford Grain Co. of Spokane and Seattle, having charge of the Whitman County territory.

### NEW MANAGERS.

The following new managers and changes of location are reported:

Iowa.—I. H. Benson for Moore Bros. & Co., at Alexander; Ed. McElwain of Blenco at Sloan; Wm. Forney at Pilot Mound; Walter Fletcher at Starlight; Sherman Young of Bristow at Dumont; E. W. Jones of Sioux Rapids at Inwood; E. A. Ellis of Frost, Minn., at Wheelerwood; J. O. Lund of Bryceland, Minn., at Scoville; Ed. Bishop, of Welcome, Minn., at Maple Hill; Richard Hardyman, of Spencer, at Terrill.

Kansas.—Perry White at Larned; C. T. Mayo of Salina at Claflin.

Indiana.—Phillip Becker of Freeland at Grammar.

Minnesota.—D. G. Lynch of the Amenia Elevator Co. at Rex Elevator, Hayfield; C. F. Langworthy for Western Elevator Co. at Klester; Milo Billings of DeSmet, S. D., at Brown's Valley; Wm. Harms at Wheaton; John Jindrick of Ward, S. D., at Creston; H. V. Heald at Brown's Valley; N. A. Beaton of Atwater at Brown's Valley; C. A. Englund of Comfrey at Darfur; H. C. Engeman at Delhi; Robert McMullen of Hutchinson at Bird Island; C. C. Ettesvold at Glenwood; M. A. Martinson at Fergus Falls; C. L. Cornell at Fairmont; J. A. Larson of Lakefield at Okabena; William Sheehan at Barry; Amund Nelson at Frost; Dennis G. Lynch at Hayfield; Ed. McGrath at St. Peter; E. E. Griffith at Timah; Levi Natnick at Grand Forks; Henry Wensloff at Klossner; Fred Toenberg at Hanska; John Knutson at Redwood Falls; Chas. Aamodt at Cottonwood; Roy Peterson of Gibbon at Delhi; Ole Wennevold of Sundahl at Flaming; P. H. Kray at Cold Spring; Mike Conway of Kenneth at Luverne; Fred Swanberg at Cokato; Endervar Ebsen of Hutchinson at Bird Island; P. N. Welch of Glencoe at Angus; James Cody at Northfield; C. O. Peterson of Atwater at Maynard; C. J. Munroe of Viola at Utica; Olaf Hegstad at Slayton; Andrew Huseby at Fosston; Mat J. Turbes at Wanda; F. N. Saum of Redwood Falls at Edgerton; James Empey at Olivia; W. S. Johnson of Livermore, Iowa, at Bombay; J. E. Lundquist of Kandiyohi at Donnelly; Chas. H. Gieb at Gaylord; Jack Fulton of Humboldt at Euclid; Alfred Bruske of Garfield at Hereford; J. K. Eagan of Glenwood at Broaten; A. P. Jasinski at Canby; Louis Leonard at Belview; Peere Kremer at Seaforth; John Vandenoever of Dexter at Sutton; Fred Bridge of Cloverdale, Iowa, at Ellsworth; F. D. Klinck of Kidder, S. D., at Odessa; H. W. Stockman at Crosby; W. C. Curry of Pine River at Garvin; G. A. Spelbrink at Lamber-

ton; Walter Borrill at Morris; V. C. Meyer of Mandon, N. D., at Fairfax; Henry T. Hanson at Fairfax; O. E. Olson of Lakota, N. D., at Hendrum; Wm. Valte, of Olivia, at Danube; H. L. Tvedt at Milan; J. M. Story, of Sioux Falls, S. D., at Windom.

North Dakota.—Fred Dovenmuhle at the Gruber Elevator at Tolna; Ole Lunewell of Benson, Minn., at Hallon; Levi Anderson of Wheaton, Minn., at Shelby; Thos. Largis of Gary at Upham; August Arndt of Young America, Minn., at Newberg; Bert Grapes of Adrian, Minn., at Bowman; F. E. Robinson of Alexandria, Minn., at Carrington; J. A. Frank of Warren, Minn., at Heaton; C. A. Aofedt at Ryder; Wm. Dunbar at Langford; H. J. Arnold at Berwick; M. H. Belton at Kenmare; C. C. Wiemals of Oriska at Fabian; Geo. Crookshank of Fargo at Oriska; E. M. Adams of Dunseith at Flaxton; Ed. Lundly at Sherwood; R. S. Roberts of Mylo, N. D., at Ambrose; George Houghton at Valley City; H. W. Stockinan at Crosby; Clark R. Cole at Tioga; Chas. Boltz of Kramer, N. D., at Hampden; A. Rilbe of Balfour, N. D., at Max; Albert O. Freitag at Mox; Selmer Larson of Reynolds at Cummings; E. P. Lindgren of Starbuck, Minn., at Newburg; Lawrence Berkeland, of Twin Valley, Minn., at Buffalo; Fred Waller of Twin Valley at Klotten; Martin Johnson of Atwater, Minn., at Osgood; W. W. Gettmann, of Wheaton, Minn., at Wolverton; Gilbert Christianson at Sheyenne, N. D.; Jim Morrow of Vernon Center, Minn., at Hatton; E. W. Eaton at Bowbells; Levi Anderson at Selby; E. P. Lindgren of Starbuck, Minn., at Newburg; R. O. Smith at Ludden; Fred Horning at Wales; J. O. Johnson of Spring Grove, Minn., at Douglas; Jacob C. Brakotski at Balfour; R. M. Mahoney of Wolford at Claresholm; J. M. Flahaven of Overly at Dunseith; C. E. Calkins at Deering; John Wirkland at Fullerton; O. M. Heath at Douglas; I. O. Toll of Medford at Lankin; J. W. Canfield of Kellogg, Minn., at Hamilton; Robert Stewart at Bantry; W. J. Gowan at Bottineau; Herman Stelter at Hebron; Con Cronin of Morton, Minn., at Inkster; W. D. Donovan of Crosby at Medford; C. S. Eaton of Inkster at Park River; F. H. Colby of Barton at Denbigh; James Nelson of Mohall at Lignite; Wm. Pfau at Carrington; Charles Colvey of Leonard at Anselm; F. G. Hemming at Kelso; Fred Lundberg of Munich at Nanson; Ed. Fuller at Colgate; John McGuigan at Langdon; Martin Erickson at Mayville; John Adams at Minnewaukon; L. A. Byington of Grand Forks, N. D., at Sawyer; John Elickson at Tioga; Arthur Freie at Berlin; C. E. Briggs at Neche; Paul Schmoker at Dickey; Spencer Douglas at St. Thomas; Henry McDonald at Upham; Joe Wilk at Upham; Thos. Gardner of Eckman, N. D., at Bottineau; A. G. Kennedy at Crete; Ernest Shunberg at Bisbee; G. W. Whitford at Devils Lake; Fred Horning at Wales; Harry Howell at Park River; John Ryder, of Minneapolis, at Rolette; C. B. Freeman, of Dazey, N. D., at Buffalo; H. J. O'Connell at Rolette; Ovid Parks, at Cyrus, Minn., at Mansrud; J. K. Dahl, of Kenmore, N. D., at Carpio; F. G. Loucks, of Kermit, N. D., at Max; Oscar Storem at Crosby; Alex Harchanko, of Max, N. D., at Benedict; Thos. Gowan, of Ardoch, N. D., at Rolette; C. T. Culver at Lakota; E. A. Rasmussen at York; Nels Everson at Lenox; John Ruttle, of Cooperstown, at McHenry; C. S. Eaton, of Orr, at Park River.

South Dakota.—M. C. Duffin, Hoven; John Alder for Reedy Grain Co. at Valin; J. N. Bundage for Bingham Bros. at Hatland; Harry Mausbridge for Hunting Elevator Co. at Mt. Vernon; L. A. Leech at Plankinton, S. D.; Victor Johnson at Peeper; P. Ulvad at Peeper; W. C. Donahue at Armour; Victor Chesley of Bonesteel at Wolsey; E. W. Anderson at West Port; Frank Fredrickson at Huffton; Herman Leech of Constata at Plankinton; E. J. Colberg of Webster at Langford; Harry Corban of Caril, Minn., at Craven; Wm. Pennell of Renville, Minn., at Amherst; G. E. Bartholomew at Rudolph; Ray Gove of Terrey, Minn., at Spain; C. J. Brown, Kennebec; Dell Loucks of Trent at Saranac; Charles Lucas at Groton; W. F. Quinn of Erwin at Turton; Dan Glenn of Waubay at Ortle; R. I. Saunders at Murdo, near Oacoma; Roy Hartwick of Saranac to Wentworth; William Van der Boom of Wheeler at Wessington Springs; Frank Riley of Butler at Bristol; Henry Stephenson at Waubay; M. E. Drake at Hitchcock; Andy McDowell at Loomis; Peter Grasser at Howard; E. M. Harper at Twin Brooks; O. Schneider at Emery; Fred Haas at Canistota; D. A. Houk at Lake Preston; J. G. Blum of Volga at Lebanon; G. E. Bartholomew at Rudolph; Emmett Clapham at Nunda; Guy Smith at Brentwood; Charles Hanson of Atwater, Minn., at Sherman; Gilbert Larson of Ellsworth, Minn., at McKane; Jud Hales at Flandreau; O. R. Dundahl, of Bird Island, Minn., at White Rock; Fred Bardell, of Scotland, S. D., at Vivian; Melvin Coulson at Lake Presson; E. W. Anderson at Westport; Levi Anderson at Selby.

Oregon.—A. M. Scott of Colfax, Wash., to Portland.

Washington.—F. S. Ratcliff of Colfax at Spokane. F. E. Hawley, with Albers Bros., at Pullman.

Wisconsin.—P. J. Stevens at New Richmond; Hans Honda of Brasington at Pepin, Wis.

## LATE PATENTS

Issued August 10, 1909.

Automatic Box-Car Loader.—Job E. Jones, Centerville, Iowa. Filed June 20, 1908. No. 930,381.

Centrifugal Grain-Drier.—Charles W. F. Steinmann, San Francisco, Cal. Filed Oct. 29, 1907. No. 930,898. See cut.

Issued August 17, 1909.

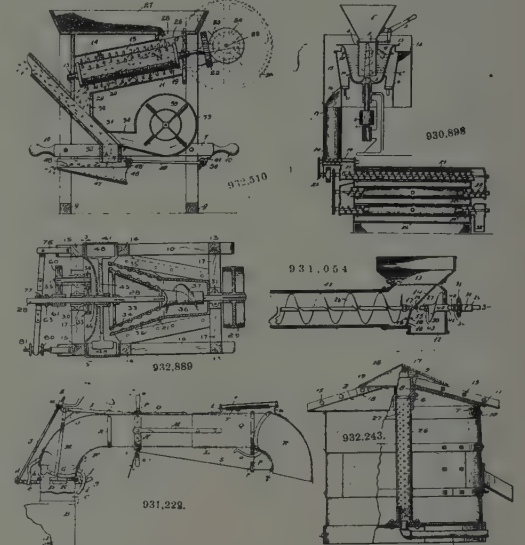
Cross-Conveyor.—Charles L. Gardner, Peoria, Ill., assignor to Gardner Weigher Company, Peoria, Ill., a corporation of Illinois. Filed Mar. 25, 1907. No. 931,054. See cut.

Pneumatic Elevator.—August Rosenthal, West Allis, Wis. Filed May 7, 1908. No. 931,222. See cut.

Issued August 24, 1909.

Elevator-Belt Pulley.—John Anderson, Galena, Kan. Filed Oct. 14, 1908. No. 931,982.

Conveyor-Belt.—Henry E. Heaton, Oroville, Cal. Filed Sept. 30, 1908. No. 932,015.



Bag-Holder.—George L. Lyon, Bainbridge, N. Y. Filed Sept. 26, 1908. No. 932,151.

Storage-Bin.—George W. Boll, Mount Hope, Kan. Filed Apr. 13, 1908. No. 932,243. See cut.

Car-Seal.—William H. Sullivan, Denver, Colo., assignor of one-half to J. E. Frank, Denver, Colo. Filed Aug. 24, 1906. No. 932,351. Renewed Jan. 4, 1909.

Issued August 31, 1909.

Pea-Huller.—Reuben W. J. Stewart, Chattanooga, Tenn., assignor to William Howard and W. P. Moore, Chattanooga, Tenn. Filed Apr. 10, 1909. No. 932,510. See cut.

Corn-Sheller.—Louis J. McMillin, Indianapolis, Ind. Filed Jan. 16, 1909. No. 932,889. See cut.

### FARMERS' UNION IN WASHINGTON.

Farmers' Educational and Co-operative Union of the Inland Empire, claiming to have 10,000 members and to control 200 warehouses of 15,000,000 bushels' capacity in eastern Washington and northern and central Idaho, met in Spokane on August 10, when it was decided to make a charge of 25 to 50 per cent under the handling charges made at Tacoma and Portland.

Since the movement was started by the Union to gain control of warehouses, with the intention of reducing charges, elevators and warehouses have been bought, built or leased in 100 towns in eastern Washington and in the Panhandle counties of Idaho. These will have an aggregate capacity sufficient to handle 40 per cent of the crop this year. The Union has a representative at Tacoma as selling agent. The declared policy is not to fix an arbitrary value upon grain because of the reputed strength of its membership, but to reduce storage charges to a minimum and to sell directly to the shipper and the miller and obtain the highest prices that the markets afford.

The meeting of the warehouse representatives and the executive committee of the Union was held with the greatest secrecy, and several resolutions affecting the policy of the organization were passed. However, the officers declined to make these public. One resolution given out shows that the executive committee indorsed the work of the warehouse men and urging the support of all members of the Union.

The Union at Walla Walla, Wash., has completed arrangements to receive daily quotations on wheat and grain direct from Liverpool, through the Tacoma Board of Trade.



## ENGLISH AGRICULTURE.

The agricultural prosperity of England under the Plantagenets was considerable, as Professor Thorold Rogers showed in his great work. Prices varied greatly from district to district, owing to the difficulties of transport. Thus in 1459 wheat was 2 shillings (48c) per quarter (say 6c a bushel), equal to 20s. (\$4.80, or 60c) of present money, dearer in the Midlands than in East Anglia, then as now the granary of England, says the London Standard. In 1460 the country was more than self-supporting, and Parliament passed an act to prevent too much wheat going out of the country. Somewhat later farmers secured an act to prevent excessive imports in years of a short home crop. The price fixed both for imports to be allowed and for exports was 6 to 8s. per qr., about equal to 66s. (\$15.84) per qr. now. When the production was large enough to cause the price to fall below this level wheat might be sold abroad until the level was regained.

In the reign of Henry VIII a new situation was created by the immense development of sheep farming, the double profit on mutton for food and wool for clothing making pasture pay better than arable. The proclamation of 1521 is in effect our first sign of a wheat panic. In 1549 there was a severer panic; mutton was ordered to be sold at a uniform price, about 12c. per lb. of present money, and no farmer was allowed to keep more than 2,000 sheep. In 1552 a third scare arose, and all speculation in corn for future delivery was made penal. The country was ceasing to hold its own as a wheat grower. Terrible distress prevailed for three years at least—1596-98. Wheat cost 92s. per qr., equal to, perhaps, 184s. now! The money equivalents became very difficult at this epoch, but it is clear that during the next 40 years the masses were compelled to give up wheat bread and take to rye and barley. Things mended very slowly, and 200 years' dependence of the community on darker bread than that made from pure wheat set up that prejudice which to this day is felt in the refusal of the masses to eat other than ultra-white and excessively fine ground flour.

## Grain and Seeds

## SEEDS FOR SALE.

Northern grown winter wheat and rye, timothy seed and early Ohio potatoes.

N. J. OLSEN CO., Moorhead, Minn.

## NEW WHEAT AND OATS WANTED.

New wheat and oats of every description wanted. Mail samples and name price delivered at Philadelphia. Address

L. F. MILLER & SONS, Philadelphia, Pa.

## KAFFIR CORN AND CANE SEED.

Write us for prices bulk and re-cleaned, even weight sacked f. o. b. Oklahoma City, Kansas City, St. Louis or Chicago; immediate shipment.

E. R. & D. C. KOLP, Oklahoma City, Okla.

## FLOUR AND MILL FEEDS.

Mixed cars of flour and mill feeds in 100-pound sacks are our specialties. Would like to send you a trial order to convince you of the superiority of our products.

ANSTED & BURK CO., Springfield, Ohio.

## For Sale

[Copy for notices under this head should reach us by the 12th of the month to insure insertion in the issue for that month.]

## ELEVATORS AND MILLS

## FOR SALE.

Grain Elevator in southeastern Minnesota on C. M. & St. P. Ry. Capacity: 20,000 bushels. Gasoline engine, dump scale. In first-class condition. Good business. Receipts: 100,000 bushels. Address

R. E. JONES CO., Wabasha, Minn.

## FOR SALE OR EXCHANGE.

Ohio, Indiana and Michigan elevators. Have several choice propositions. Let us know your wants. Address

TRI-STATE ELEVATOR CO., Hicksville, Ohio.

## FOR SALE.

Grain elevator. Bin capacity, 10,000 bushels or more; additional capacity, 25,000 bushels. At Mt. Carroll, Ill.; \$3,000 if taken soon. Address

ALLEMAN & HARTMAN, Mt. Carroll, Ill.

## FOR SALE.

Elevators in Illinois and Indiana that handle from 150,000 bushels to 300,000 bushels annually. Good locations. Prices very reasonable. Address.

JAMES M. MAGUIRE, Campus, Ill.

## FOR SALE.

Small line of elevators, doing a good business, in the best part of southern Minnesota where crop prospects never looked better at this time of year. Reason for selling, too much other business to attend to. Address

LOCK BOX 99, Henderson, Minn.

## FOR SALE.

First-class, paying line of elevators, with cleaning house, southwestern Minnesota and northwestern Iowa, on Omaha Road. One-half cash, balance time, or good improved land. A great opportunity. Write for description. Address

ELEVATOR, Box 7, care "American Elevator and Grain Trade," Chicago, Ill.

## FOR SALE.

At Thomas, S. D., on the South Dakota Central Railway, modern, up-to-date elevator, erected during the fall of 1908; size, 28x30 feet; 40-foot cribbing; capacity, 25,000 bushels; also flour shed 28x9 feet; coal shed 16x60 feet, five bins; together with the lots on which the buildings stand. Address

C. E. McKINNEY, Trustee, Sioux Falls, S. D.

## FOR SALE.

Nine modern country grain elevators in southern Minnesota and northern Iowa, on Rock Island road, between Estherville, Iowa, and Albert Lea, Minn. All of them open and doing business; good crops in territory. Prices and terms right; might sell separately; best of reasons for selling. Address

EARL TAYLOR, 511 Chamber of Commerce, Minneapolis, Minn.

## FOR SALE.

For sale, 22,000-bushel elevator, built of 2x6 oak cribbing, weather board siding; 25-horsepower Olds Gasoline Engine, one 12-inch leg, terra cotta engine room and office, private loading switch and ground, connected with the E. J. & E. Ry. and the B. & O., thirty-five miles east of Chicago in first-class grain country. For information write

CADWELL & SALYERS, Malvern, Iowa.

## FOR SALE.

Small mill, fully equipped and running. Stock of grain, farm implements, phosphates, gasoline, oils, etc. Everything new and in good condition. Located in flourishing southern Vermont town on main street and railroad. No competition within six miles. Send for complete description. A real opportunity at small price. Owner has other interests. Address

LOCK BOX 218, Readsboro, Vt.

## FOR SALE.

I will sell my modern, galvanized-iron-covered elevator, feed and meal mill and warehouse at Claude, county seat Armstrong County, Panhandle, Texas. Only one in county; on private switch Ft. Worth & Denver R. R.; the best grain section. Lot is 250x250 feet, three squares from court house. This is a money maker, with great, growing business. Will accept part cash and part good real estate or merchandise. Address, at once,

J. M. HARTER, Wabash, Ind.

## FOR SALE.

Elevator with sand and coal business in southern Nebraska. The best grain belt in the West. At a bargain if taken before big movement in new wheat. Write at once to

HELBIG & CO., 529 Bee Bldg., Omaha, Neb.

## FOR SALE.

Four elevators for sale: White Rock, S. D.; price \$7,000; receipts last year 125,000 bushels; good station, no fight on the market; we made last year at this station \$3,500, and crop prospects for this year are big; capacity 25,000 bushels; have best buyer at White Rock and would want to have him go with the house. Clinton, Minn., 35,000-bushel house; price \$6,000; splendid crop prospects; have the best buyer in that vicinity; will guarantee good profits. Montevideo, Minn., 35,000-bushel elevator; price \$6,000; on the main street; best location in town of only four elevators; immense territory to draw from, and there will be a big and profitable business done at this elevator this year. Granite Falls, Minn., 15,000 bushels' capacity; price \$2,500; has the best buyer in town and gets most of the wheat. We have the above elevators for sale; locations are excellent. We are selling out because we burned out at Montevideo. Address

MONTEVIDEO ROLLER MILL CO., Red Wing, Minn.

## MACHINERY

## ENGINES FOR SALE.

Gasoline engines for sale; 5, 7, 10, 20, 30 and 45 horsepower.

TEMPLE PUMP CO., 15th Place, Chicago, Ill.

## FOR SALE.

One No. 9 Bowsher Grinding Mill, with sacking elevator; one 2½-horsepower gas engine. A bargain. Address

F. GAUVIN, JR., Marlboro, Mass.

## FOR SALE.

A 10-horsepower Fairbanks-Morse Gasoline Engine, used only three days; also one (same make) 7½ k. w. generator complete. A bargain. Address

E. W. WHITE, 405 Sycamore St., Cincinnati, O.

## FOR SALE.

Two boilers, 72x18; head, ½-inch steel; shell, ¾-inch; flues, 4-inch; 88 pounds pressure; made by Murray Iron Works Co. Apply

ROSENBAUM BROTHERS, 77 Board of Trade, Chicago.

## FOR SALE.

Three No. 2 Barnard & Leas Plansifters. Have been used six years, but are in good condition. Will have to be re-clothed. Will make low price. Address

OKLAHOMA CITY MILL & ELEVATOR CO., Oklahoma City, Okla.

## FOR SALE.

One new Improved Dustless Eureka Elevator Separator; built by S. Howes Company; largest size made; good as new. Address

CLEANER, Box 6, care "American Elevator and Grain Trade," Chicago, Ill.

## FOR SALE.

Six roller Corn and Feed Mill, manufactured by Great Western Mfg. Co.; has been used in moderation for 5 years in manufacturing chick food and chops. Size of rolls 7x18. Will sell at a great bargain.

A. A. BERRY SEED CO., Clarinda, Ia.

## HISTORY OF MAY CORN

My "History of May Corn" Circular gives exhaustive data, covering the present period when corn "is in the making." Sent free.

E. W. WAGNER

98-99-100 Board of Trade

CHICAGO



## SCALES

### SCALES FOR SALE.

Scales for elevators, mills, or for hay, grain or stock; new or second-hand at lowest prices. Lists free.

CHICAGO SCALE CO., 299 Jackson Boulevard, Chicago, Ill.

## Miscellaneous Notices

[Copy for notices under this head should reach us by the 12th of the month to insure insertion in the issue for that month.]

## HELP WANTED

### WANTED.

Head miller to take charge of 100-barrel mill. One who would take \$3,000 to \$5,000 stock in a first-class mill and elevator. Address.

HARTLEY MILL & ELEVATOR CO., Hartley, Texas.

## POSITIONS WANTED

### WANTED.

Position in elevator anywhere throughout the corn belt. Am thirty-six years old, ten years' experience at one place. Understand elevator business thoroughly. Can do anything from managing to working in the elevator. Address

JOHN McLAUGHLIN, Box 76, Verona, Ill.

## ELEVATORS WANTED

### WANTED.

Elevator or mill and elevator for good improved Illinois or Iowa farm. Address

IOWA, Box 1, care "American Elevator and Grain Trade," Chicago, Ill.



### SAVE TIME, LABOR, FUEL

and avoid exposure to the weather, by installing a Schmitz Scale Ticket Passer

By its use the ticket is passed from the office to teamster with one movement of the hand.

Write for full particulars to  
**J. A. SCHMITZ**  
2811 North Hermitage Avenue  
CHICAGO

## ROOFING AND SIDING

### SYKES STEEL ROOFING CO.

114 W. 19th Place, Chicago

### MAKERS OF FIREPROOF WINDOWS

We manufacture all gauges of corrugated iron, either painted or galvanized. We make Patent Cap Roofing, Roll Cap roofing, "V" Crimped Roofing, Metal Ceilings, etc., etc.

We make a specialty of

### Corrugated Iron and Metal Roofing For Grain Elevators

And take contracts either for material alone or job completed  
Write us for prices. We can save you money.

# GRAIN RECEIVERS

## MILWAUKEE.

O. MOHR, Mgr. G. C. HOLSTEIN, Sec'y-Treas.

### Mohr-Holstein Commission Co.

29 Chamber of Commerce  
MILWAUKEE

Sample Grain a Specialty

BRANCH OFFICES AT CHICAGO, MINNEAPOLIS

B. G. Ellsworth, President H. H. Peterson, Vice-President.  
E. H. Hiemke, Secretary

### L. Bartlett & Son Co. GRAIN

COMMISSION MERCHANTS

Room 23 Chamber of Commerce Building  
MILWAUKEE, WIS.

### The Franke Grain Company

Receivers and Shippers of

### GRAIN AND MILL-FEED

Rooms 43-44 Chamber of Commerce  
MILWAUKEE, WIS.

### OUR SPECIALTIES:

### Malting Barley

### Milling and Distilling Rye

FAGG & TAYLOR, Shippers

MILWAUKEE, WIS.

## PEORIA

ESTABLISHED 1875.

### P. B. & C. C. MILES Grain Commission Merchants BUYERS AND SHIPPERS

36-37 Chamber of Commerce, PEORIA, ILL.

A. G. TYNG, Jr. D. D. HALL

### TYNG, HALL & CO. Grain and Commission Merchants

Rooms 33 and 35 Chamber of Commerce  
PEORIA, ILLINOIS

## DETROIT

A. S. DUMONT R. C. ROBERTS R. L. HUGHES

### Dumont, Roberts & Co.

RECEIVERS GRAIN SHIPPERS

Chamber of Commerce  
DETROIT, MICH.

Merchants Exchange  
DECATUR, ILL.

Consignments Solicited. Ask for our bids and quotations.

### CAUGHEY & CARRAN

DETROIT, MICH.

Grain and Seed Merchants and Commission  
OUR SPECIALTY: OATS AND CLOVER SEED

We handle Beans, Barley, Rye, Corn, Wheat. Try us. Liberal advances.

OFFICES: 620 to 624 Chamber of Commerce  
ELEVATOR and SEED HOUSE: Cor. 14th and Baker Sts.

## ST. LOUIS

### Daniel P. Byrne & Co.

General Commission Merchants

SUCCESSORS TO

Redmond Cleary Com. Co.

Established 1854

Incorporated 1887

Grain, Hay, Mill Feed and Seeds

Chamber of Commerce

St. Louis, Missouri.

### Slack-Fuller Grain Co.

RECEIVERS AND SHIPPERS OF

## GRAIN

CONSIGNMENTS SOLICITED

208 Merchants' Exchange ST. LOUIS, MO.

Ship your Grain, Hay and Seeds to

### John Mullally Com. Co.

St. Louis, Mo.

Best of attention paid at all times to all consignments.  
Members St. Louis Merchants' Exchange and Chicago Board of Trade.

### PICKER & BEARDSLEY COM. CO.

St. Louis, Mo.

### GRAIN, HAY and GRASS SEEDS

We protect your interest on grades and weights and make prompt returns. Try us for RESULTS when you ship to St. Louis. Established 1876.

Thos. Cochrane, Lincoln, Neb. M. W. Cochrane, St. Louis.

### Cochrane Grain Co.

Receivers and Shippers of

### GRAIN AND HAY AND SEEDS

305 and 306 Chamber of Commerce, ST. LOUIS

MARSHALL HALL, Pres. J. B. BETHUNE, Secy.-Treas.

### W. L. Green Commission Co.

## GRAIN

Members { Merchants Exchange of St. Louis.  
Chicago Board of Trade.

203 Merchants Exchange, ST. LOUIS, MO.

## PITTSBURG

### D. G. Stewart & Geidel

GRAIN, HAY AND FEED

RYE A SPECIALTY

Office 1019 Liberty St. Pittsburg, Pa.

Proprietors Iron City Grain Elevator.

Capacity 300,000 bu.

## DECATUR



OUR BIDS ARE GOOD ONES



# GRAIN RECEIVERS

## TOLEDO

Grain, Seed and Provision markets are on an Aeroplane basis. Fly with us. Keep posted. Read our specials. Our Boy Solomon will lead you into temptation. Send C. A. King & Co., Toledo, O., your Chicago and Toledo future orders and Toledo cash business. Be friendly. Write occasionally.

### Active Markets

of late give splendid opportunities for trading in futures of grain and seed. For good service send your orders to **Southworth & Co., Toledo, Ohio**

**JOHN WICKENHISER & CO.,**  
**Buyers and Shippers of Grain**  
 We buy F. O. B. your station for direct shipment to interior points.  
*Personal attention to consignments.*  
**TOLEDO, OHIO**

Frederick W. Rundell James E. Rundell  
 ESTABLISHED 1877  
**W. A. RUNDALL & CO.**  
**Grain and Seeds**  
 CASH AND FUTURES  
 Consignments Solicited Ask for our Daily Grain Bids  
 Room No. 33 Produce Exchange, TOLEDO, O.

FRED O. PADDOCK, Pres. JESSE W. YOUNG, V.-Pres.  
 ORMOND H. PADDOCK, Secy. & Treas.  
**The Paddock-Hodge Co.**  
**GRAIN**  
 TOLEDO, OHIO  
 Cash and Futures—Wire, Write or Phone and we will give you our best services.

ESTABLISHED 1868  
**SEEDS**  
 We will buy or sell Red and Alsike Clover, also Timothy Seed. Try us.  
**S. W. FLOWER & CO., - Toledo, Ohio**

FRED MAYER FRED JAEGER  
 ESTABLISHED 1879.  
**J. F. ZAHM**  
**& COMPANY**  
 TOLEDO—OHIO  
**Specialists on handling consignments** of grain and seeds and filling orders for futures.  
**Pay Drafts** promptly on all consignments.  
**Our Daily Red Letter** will be sent for the asking.

## NEW YORK CITY

**L. A. MOREY CO.**  
 SUCCESSORS TO  
**Jones and Morey Co.**  
**GRAIN**  
 Brokerage and Commission.  
 C1 and 2 Produce Exchange NEW YORK  
 CONSIGNMENTS SOLICITED  
 MEMBERS { Chicago Board of Trade  
 New York Produce Exchange  
 National Grain Dealers' Association

**FORBELL & KIPP**  
 Commission Merchants  
 342 Produce Exchange NEW YORK  
 Try us with consignments of oats and corn.  
 We are Specialists in these grains and are strictly Commission Merchants.

**Cushing & Brandt**  
 Commission Merchants & Grain Brokers  
 Liberal Advances on Consignments  
 424 Produce Exchange New York  
 MEMBERS  
 New York Produce Exchange Chicago Board of Trade  
 Buffalo Chamber of Commerce Buffalo Corn Exchange  
 Grain Dealers' National Association

**BROOKLYN HAY & GRAIN CO.**  
 HAY, STRAW AND GRAIN  
 COMMISSION MERCHANTS  
 ON ALL MARKETS IN NEW YORK HARBOR  
 Office: Borough of Brooklyn, New York

## CAIRO

**H. L. Halliday Milling Co.**  
 RECEIVERS AND SHIPPERS  
 CORN-WHEAT-OATS  
 CAIRO, ILLINOIS

**REDMAN, MAGEE & CO.**  
**GRAIN**  
 DELTA ELEVATOR, Cairo, Ill.

## BALTIMORE

LOUIS MÜLLER, Pres't. JOHN M. DENNIS, V.-Pres't.  
 FERDINAND A. MEYER, Treas.  
 THOMAS C. CRAFT, JR., Ass't Treas.  
**LOUIS MÜLLER CO.**  
 Grain Receivers and Exporters  
 BALTIMORE, MD.  
 Members of the Baltimore Chamber of Commerce, Chicago Board of Trade, St. Louis Merchants' Exchange, Grain Dealers' National Association, Indiana Grain Dealers' Association.

GEO. A. HAX Established 1882 J. B. WM. HAX  
**G. A. HAX & CO.**  
 GRAIN AND HAY COMMISSION  
 445 North Street, - - Baltimore, Md.  
 MEMBERS National Grain Dealers' Association  
 National Hay Association

## BUFFALO

W. W. ALDER T. J. STOFER  
**ALDER & STOFER**  
 COMMISSION MERCHANTS  
 We do not buy any grain, but handle on commission, and solicit your Buffalo consignments  
 83 Chamber of Commerce, Buffalo, N. Y.

**Electric Elevator and Milling Co.**  
 Chamber of Commerce, Buffalo, N. Y.  
 Elevator Capacity 2,000,000 bu.  
 Has facilities for cleaning, separating, clipping and sacking grain. Receives and stores all rail and lake grain.  
 We Solicit Consignments

L. S. CHURCHILL, President  
 G. W. BARTLETT, Treasurer  
**The Churchill Grain & Seed Co.**  
 Commission Orders Executed. Grain and Seed Bought and Sold  
 Offices: Buffalo, N. Y. Members  
 Toledo, Ohio. New York Produce Exchange  
 Seed Warehouse: Toledo Produce Exchange  
 Located at Toledo, Ohio Buffalo Corn Exchange

W. E. TOWNSEND A. T. WARD  
**TOWNSEND-WARD CO.**  
**GRAIN COMMISSION**  
 Buffalo, - - - New York  
 We solicit your consignments for Buffalo market





# GRAIN RECEIVERS

CHICAGO


**E. W. BAILEY & CO.**
**Commission Merchants**

GRAIN, SEEDS AND PROVISIONS

72 Board of Trade CHICAGO



W. N. ECKHARDT, Prest. J. W. RADFORD, Vice-Prest.

E. A. DOERN, Secy. C. E. SCARRITT, Treas.

**Pope & Eckhardt Company**  
**Commission Merchants**

Grain and Seeds

317-321 Western Union Building

CHICAGO

**J. ROSENBAUM GRAIN CO.**

(INCORPORATED)

GRAIN MERCHANTS

CHICAGO


**RUMSEY & COMPANY**  
**COMMISSION MERCHANTS**

Consignments a Specialty for Forty Years

Branch Offices  
PEORIA  
ST. LOUISI. P. RUMSEY  
FRANK M. BUNCH  
HENRY A. RUMSEY

CHICAGO

GEO. S. DOLE, Pres. H. N. SAGER, Sec.

**J. H. DOLE & CO.**

(Established 1852)

Commission Merchants, Grain and Seeds

We solicit your  
**CONSIGNMENTS**  
and orders in futures

226 La Salle Street. CHICAGO

PHILIP H. SCHIFFLIN, Pres. EUGENE SCHIFFLIN, Secy.-Treas.

**PHILIP H. SCHIFFLIN & CO.**

INCORPORATED

**Commission Merchants**
515-518 Postal Telegraph Bldg.  
CHICAGO, ILLINOISConsignments of all kinds of Grain and Field  
Seeds a specialty
**Lamson Bros. & Co.**

ESTABLISHED 1874

Commission Merchants

...AND...

Track Buyers of Grain

6 Board of Trade CHICAGO

BRANCH OFFICES IN IOWA

|                |              |              |
|----------------|--------------|--------------|
| Des Moines     | Ft. Dodge    | Cedar Rapids |
| Iowa City      | Storm Lake   | Waterloo     |
| Parkersburg    | Iowa Falls   | Mason City   |
| Sioux City     | Independence | Atlantic     |
| Council Bluffs |              |              |

Ask for Bids

Consignments Solicited

CHICAGO

**C. H. THAYER & CO.**

GRAIN, SEEDS, FUTURES

Your Consignments and Future Orders Solicited

Our untarnished record for more than a quarter of a century, backed up with over \$100,000.00 capital, certainly speaks for itself.

2 and 4 Sherman St., CHICAGO

Minneapolis Milwaukee St. Louis Kansas City

**T. E. WELLS & CO.**

COMMISSION MERCHANTS

1011-1017 ROYAL INSURANCE BUILDING, CHICAGO

Strict attention given to consignments or orders

Oats and Barley Specialties

Liberal Advances Made

W. M. TIMBERLAKE in charge Cash Grain Department

My customers do a profitable business because I handle their consignments profitably at this end. Try me on your Chicago cash or future business.

B. S. ARMSTRONG

Postal Telegraph Building Chicago, Ill.

No ORDER too Large for Me to Execute

Grain Consignments my Specialty

**SAM FINNEY**

715 BOARD OF TRADE, CHICAGO

Or too Small to be Appreciated



J. H. WARE E. F. LELAND

Consign your grain and seeds and send your  
Board of Trade Orders to
**WARE & LELAND**

400-410 Postal Telegraph Bldg. :: CHICAGO

Long Distance Phones : Harrison 4867 and 4868

GRAIN, PROVISIONS,  
STOCKS AND COTTON.

Write for our Daily Market Letter

Your Interests Are Our Interests

Special attention given to cash  
grain shipments



# GRAIN RECEIVERS

## CHICAGO

A. L. SOMERS, Pres. C. W. BUCKLEY, Sec'y and Treas.

### SOMERS, JONES & CO.

(Incorporated)

COMMISSION MERCHANTS

82 Board of Trade Bldg., Chicago

GRAIN AND FIELD SEEDS

CONSIGNMENTS AND ORDERS FOR FUTURE DELIVERY SOLICITED. :: LIBERAL ADVANCES ON CONSIGNMENTS

## CHICAGO

For Intelligent, Prompt and Efficient Service

Consign to

### Rosenbaum Brothers

Commission Merchants

77 Board of Trade

Chicago

## KANSAS CITY

R. J. THRESHER, Pres.

L. A. FULLER, Sec'y

### THRESHER-FULLER GRAIN CO.

Grain Commission Merchants

CONSIGNMENTS SOLICITED

Grain Bought and Sold for Future Delivery

311-14 Board of Trade

KANSAS CITY, Mo.

Square Dealing

and Top prices.

If we have not handled your Chicago Business, try us.



**MONTAGUE & COMPANY**  
Suite 36,  
Board of Trade  
Bldg., CHICAGO.

Grain Receiving and Commission Merchants.

## NO USE TRYING

to get better service than that afforded by

### CRIGHTON & CO.

402-403 Royal Insurance Bldg., CHICAGO

Send us your consignments and become one of our pleased patrons

### W. H. MERRITT & CO.

GRAIN BUYERS AND SHIPPERS

CORRESPONDENCE SOLICITED

87 Board of Trade

CHICAGO, ILL.

### J. C. Shaffer & Co.

BUYERS AND SHIPPERS OF GRAIN

240 LaSalle St.

Chicago

### F. E. WINANS & CO.

GRAIN AND FIELD SEEDS  
COMMISSION MERCHANTSBarley, Oats, Wheat, Corn, Rye, Timothy, Clover, Flax, Hungarian Millet  
6 SHERMAN STREET, CHICAGO

Write us freely on all matters pertaining to grain and field seeds. Your questions fully and cheerfully answered; particular attention paid to timothy seed and grain by sample. Consignments and speculative orders receive our careful personal attention.

### ARMOUR GRAIN CO.

GRAIN DEALERS

CONSIGNMENTS SOLICITED. This department is fully equipped in every way to give the very best service in Chicago.

205 La Salle St.

CHICAGO

J. K. HOOPER  
PresidentERVIN A. RICE  
Vice-PresidentE. G. BROWN  
Secy-Treas.

### HOOPER GRAIN CO.

OAT SHIPPERS

Postal Telegraph Bldg., Chicago

OPERATE ATLANTIC ELEVATOR AND GRAND TRUNK WESTERN ELEVATORS, CHICAGO

### H. M. PAYNTER GRAIN COMMISSION

Special attention given consignments of grain and seeds

Orders in futures carefully executed

700-718 Royal Insurance Bldg., Chicago

All business transacted through and confirmed by H. W. Rogers &amp; Bro.

H. W. ROGERS, Pres.

J. C. ROGERS, Vice.Pres.

C. J. HURLBUT, Sec'y and Treas.

### ROGERS GRAIN CO.

(Incorporated)

Buyers, Shippers and Exporters of GRAIN

Elevator Proprietors on Illinois Central and other Railroad Systems

Main Office: 700-701 Royal Insurance Building

CHICAGO

### BOGERT, MALTBY & CO.

(INCORPORATED)

COMMISSION MERCHANTS

Correspondence and Consignments Solicited

Orders for futures delivery carefully executed.

Screenings and Mill Feed

306-308 Postal Telegraph Bldg., CHICAGO

### Hulburt, Warren & Gandler

Stock Brokers and Commission Merchants, Grain and Provisions

Business solicited in any department Receiving, Shipping, Futures

202 LA SALLE ST.

CHICAGO

Good Prices  
Prompt Returns  
Very Best Attention

### AND W. A. FRASER CO.

"They're Running Mates"

MINNEAPOLIS

CHICAGO

MILWAUKEE

## CLEVELAND

### The Union Elevator Co.

BUYERS AND SHIPPERS

Wheat, Corn, Oats, Hay and Straw

Our Speciality: Recleaned Illinois Shelled Corn  
CLEVELAND, O.

## PHILADELPHIA

### L. F. MILLER & SONS,

Receivers and Shippers of

GRAIN, FEED, SEEDS, HAY, ETC.

OFFICE: 2931 N. BROAD ST., PHILADELPHIA, PA.

CONSIGNMENTS SOLICITED. Special attention given to the handling of CORN AND OATS.

REFERENCES: { Manufacturers' National Bank, Philadelphia, Pa.  
Union National Bank, Westminster, Md.

## MINNEAPOLIS

### F. H. PEAVEY & CO.

MINNEAPOLIS,

GRAIN RECEIVERS

MINN.

Consignments Solicited.

MILLING WHEAT A SPECIALITY

### Cargill Elevator Company

WHOLESALE FIELD SEEDS

MINNEAPOLIS,

MINN.

## CINCINNATI

### THE GALE BROS. CO.

Grain Merchants

Largest and best handlers of off grades in the central western states. An expert grain man at the head of each grain department. Submit samples.

CINCINNATI,

OHIO

## INDIANAPOLIS

### FREEMAN BROS. & CO.

Hay, Straw and Grain  
COMMISSION MERCHANTS

Correspondence and Consignments Solicited. . . Market Reports on Application.

66 Board of Trade  
CHICAGO, ILL.

Grain bought and sold for future delivery.

## DO YOU REALIZE

That country trade always pays you best in every way?

We work a large country business. See the point?

JONAS F. EBY &amp; SON, LANCASTER, PA.

### The Bassett Grain Co.

INDIANAPOLIS

Telephones 80

Board of Trade



# YOU COULDN'T

BURN THIS ONE DOWN IF YOU TRIED



It is built entirely of Concrete and Steel, and we put it up in 60 days. If you are about to build you had better see us, or let us know when and where we can see you.

**MACDONALD ENGINEERING CO.**  
Specialists in Concrete  
549-53 Monadnock Bldg. CHICAGO

# Witherspoon-Englar Company

Designers and Builders of

## FIREPROOF Grain Elevators



Cut shows four reinforced concrete grain tanks 30 ft. diameter, 60 ft. high, connected with brick operating house 30x60 feet, erected for the American Maize Products Co. at Roby, Ind.

Designs and estimates promptly furnished for all kinds of buildings for the handling and storage of grain in any locality.

1244-1250 Monadnock Building, Chicago, Ill.

# John S. Metcalf Co.

Builders of

*Terminal Elevators*

*Concrete Storage Bins*

*Transfer Elevators*

**Drawings and Specifications**

THE TEMPLE, CHICAGO

# ELWOOD'S GRAIN TABLES

Show the value of any number of bushels or pounds of WHEAT, RYE, OATS, CORN OR BARLEY at any given price from 10 cents to \$2.00 per bushel. One of the most useful books ever offered to millers. Indorsed by prominent millers and grain dealers. Bound in cloth, 200 pages. Mailed on receipt of price.

\$1.25

Mitchell Bros. Co., 315 Dearborn Street, Chicago, Illinois



# C. E. BIRD & CO. GRAIN ELEVATOR BUILDERS

318 Corn Exchange, MINNEAPOLIS, MINN.

In 15 years' experience we have no unsatisfied patrons:



# The No Back Pressure "1905" CYCLONE Dust Collector

"The 1905 Cyclone is from 27% to 39% more efficient than the old Cyclone considering both power consumed and quantity of air discharged."

The Mechanical Engineering Dept.,  
UNIVERSITY OF MICHIGAN.

"The velocity of air on suction side of fan is always greater in the "1905" Cyclone Collector, due to its lower resistance and consequent greater air handling capacity."

The Mechanical Engineering Dept.,  
UNIVERSITY OF MICHIGAN.

"The per cent of loss saved by the "1905" Cyclone over the old Cyclone is from 71.2% to 80%. These losses are due to the dust collector friction and take into consideration nothing but the collector."

The Mechanical Engineering Dept.,  
UNIVERSITY OF MICHIGAN.

The New Cyclone "1905" manufactured exclusively by

**THE KNICKERBOCKER COMPANY**  
JACKSON, MICHIGAN



# JAMES STEWART & CO.

## GRAIN ELEVATOR DEPARTMENT

1811 Fisher Building

W. R. SINKS, Manager

CHICAGO

R. H. FOLWELL, Engineer

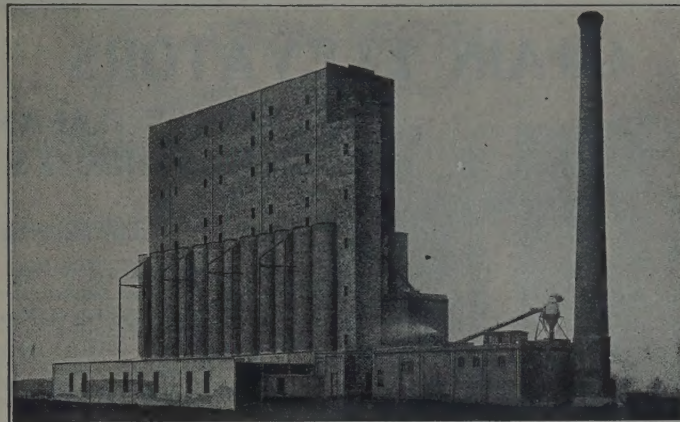


Grand Trunk Pacific Railway Co. Elevators in Process of Construction at Fort William, Ont. Capacity 3,500,000 Bushels.

**We Build Grain Elevators, Any Type of Construction, in Any Part of the World**

Also General Contractors with Offices in the Following Cities,  
Wire, Write or Call Personally.

NEW YORK, Hudson Terminal Building  
PITTSBURGH, PA., Westinghouse Building  
SAN FRANCISCO, CAL., 709 Mission Street  
CANADIAN STEWART CO., Ltd., Montreal, Can., Eastern Townships Bank Building  
FORT WILLIAM, Ontario, Canada  
ST. LOUIS, MO., Bank of Commerce Building  
NEW ORLEANS, LA., Hibernia Bank Building  
DENVER, COLO., 1st National Bank Building



## Fireproof Grain Elevator

Recently completed for the Chicago, Burlington & Quincy Railway Co. at Harlem (Kansas City), Missouri.

This elevator is an entirely new type throughout, originated, designed and constructed by

## The Barnett & Record Company

Engineers and General Contractors

MINNEAPOLIS, MINNESOTA

GRAIN ELEVATOR

PLANS AND SPECIFICATIONS

## MOULTON & EVANS

406 CORN EXCHANGE

MINNEAPOLIS - MINNESOTA

GRAIN ELEVATOR

CONSTRUCTION OUR SPECIALTY

Telephone, Monroe 1614

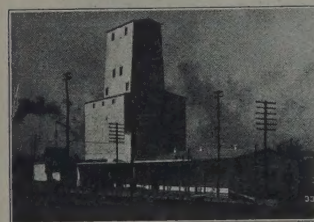
## OLSON BROTHERS & CO.

ENGINEERS and CONTRACTORS

Grain Elevator Construction Power Transmission

Elevating and Conveying Machinery

2418-2422 Bloomingdale Avenue  
CHICAGO



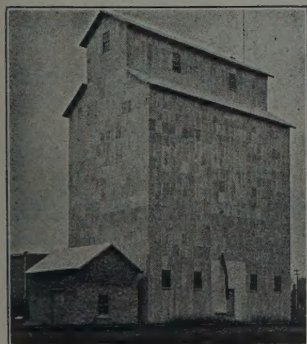
## Fred Friedline & Company

DESIGNERS AND BUILDERS

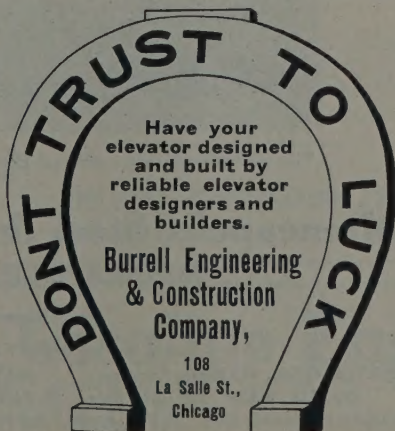
Transfer, Terminal and Country Elevators,  
Warehouses, Tankage in Frame, Iron-Clad  
or Fire-Proof Construction, Concrete Tanks

Plans and Specifications a Specialty.  
Write for Sketches and Estimates.

253-261 La Salle Street, CHICAGO.  
C. M. SECKNER FRED FRIEDLINE



Long Distance Telephone  
Main 799



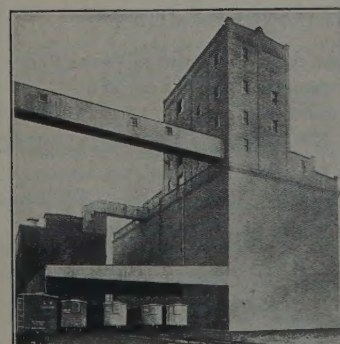
## G. T. HONSTAIN

Contractor and Builder of

## Grain Elevators

29th St. and Grand Ave.

MINNEAPOLIS - MINN.

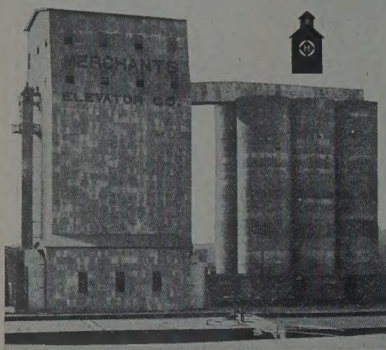


A few elevators recently completed

|                                       |                       |
|---------------------------------------|-----------------------|
| Northwestern Consol. Mill. Co. Minn's | 1,000,000             |
| Nebraska City & Ill. Ele. Co. Chicago | 2,000,000             |
| Bartlett Frazier Co.                  | 1,000,000             |
| H. Rogers Co. St. Louis               | 500,000               |
| F. H. Peavey & Co. Minneapolis        | 1,000,000             |
| S. S. Linton & Co.                    | 650,000               |
| Interstate Grain Co.                  | 450,000               |
| City Elevator Co.                     | 500,000               |
| Security Grain Co.                    | 400,000               |
| Royal Milling Co. Great Falls, Mont.  | 100,000               |
| Jennison Bros. Janesville, Minn.      | 100,000               |
| 400 country elevators                 | from 10,000 to 50,000 |



## GRAIN ELEVATORS



### STORAGE TANKS or WAREHOUSES

IN  
Wood or FIRE-PROOF Materials

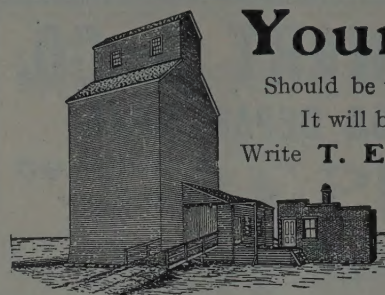
PLANS—SPECIFICATIONS—ESTIMATES

We design and erect the structural work and mechanical equipment of Grain Handling or Storage Plants from a country receiving station to a terminal transfer house.

**L. O. HICKOK & SON**

Engineers and Contractors

320 Flour Ex'ge Minneapolis, Minn.



## Your Elevator

Should be the best that money can buy.

It will be if IBBERSON builds it.

Write **T. E. IBBERSON**, 308-310-312  
Corn Exchange, Minneapolis,  
Minnesota.

**He Knows How.**

## STEEL STORAGE & ELEVATOR CONSTRUCTION CO.

DESIGNERS AND BUILDERS OF

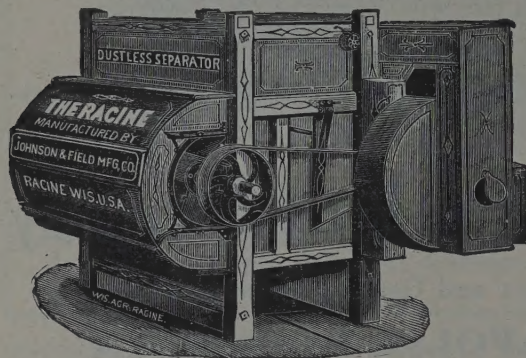
## STEEL OR CONCRETE GRAIN ELEVATORS

BUFFALO, N. Y.

## "The Racine" Dustless Grain Separator

Embodies more Points of Excellence than any other machine offered for similar purposes, and is Light Running, Large in Capacity, Perfect in Separation and with Great Strength and Durability.

MADE IN DIFFERENT SIZES TO MEET DIFFERENT REQUIREMENTS.



### The Racine Heavy Warehouse Mill

Is built extra heavy and bolted throughout. This machine has large capacity and is more durable than any other Warehouse Mill made.

### ELEVATOR MACHINERY AND SUPPLIES

Send for catalogue before placing order.

**JOHNSON & FIELD MFG. CO., Racine, Wis.**

**G. H. BIRCHARD**

Contractor of

### Grain Elevators

Especially Designed for Economy of  
Operation and Maintenance  
LINCOLN, NEB.

**J. A. Horn Construction Company**

Oklahoma City, Okla.

DESIGNERS AND BUILDERS OF

**Grain Elevators, Alfalfa Meal Mills.**

Complete Equipments Furnished.

## SEEDS

### THE ALBERT DICKINSON CO.

DEALERS IN

GRASS SEEDS, CLOVERS, FLAX SEED, LAWN GRASS, BEANS,  
PEAS, POPCORN, BIRD SEEDS, BUCKWHEAT, BAGS, ETC.  
CHICAGO, Ill. Branch: Minneapolis, Minn.

## The Wiederholdt System

### Reinforced Tile Concrete

THE MOST IMPROVED AND APPROVED SYSTEM FOR

**Grain Elevators, Mill Construction,  
Grain Bins, Silos, Storage Bins,  
Tanks, etc.**

BUILT EXCLUSIVELY BY

**Wiederholdt Construction Co.**

606-607 New National Bank of Commerce Bldg.,

ST. LOUIS, MO.

## The BOOK of CORN

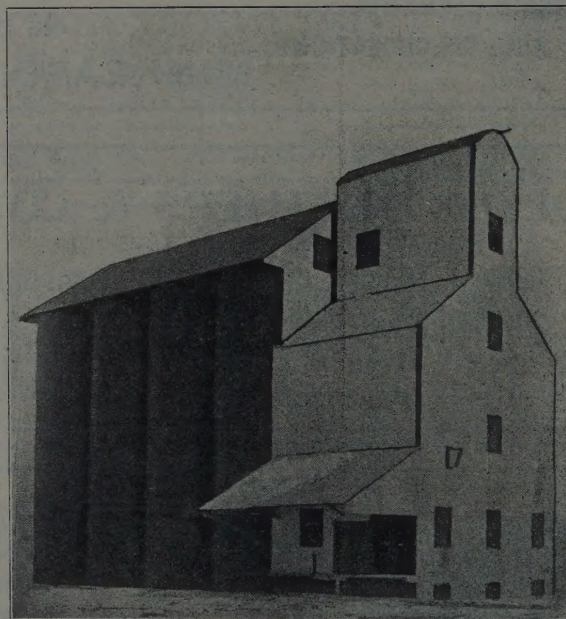
SHOULD BE ON THE DESK OF EVERY  
ELEVATOR MAN WHO HANDLES CORN

It is the only work that covers the field from the growing to the final disposition of the cereal. An exhaustive treatise on corn growing, breeding, marketing, etc.

The book has been prepared by specialists, under the direction of Herbert Myrick, and covers all features of the corn business. It tells not only how corn should be treated by the farmer as producer in every step of the program of corn culture, but also how to market corn and what ultimately becomes of it—on the farm, as feed; or in the world's markets as the raw material of vast manufacturing industries

Price, \$1.50 per copy

For sale by **MITCHELL BROTHERS CO.**  
315 DEARBORN STREET, CHICAGO, ILLINOIS



The Gallatin County Farmers' Elevator at Belgrade, Mont.

## Minneapolis Steel & Machinery Co.

MINNEAPOLIS, MINN.

BRANCH OFFICES:

DENVER, COLO., 313 Mining Exchange SALT LAKE CITY, UTAH, 324 Dooley Block  
SEATTLE, WASH., 338 Globe Bldg. EL PASO, TEXAS, 313 E. P. & S. W. Bldg.  
BUTTE, MONT., 352 Phoenix Bldg.





## GOOD JUDGMENT

for fire insurance is to select the company patronized by your fellow grain dealers. The



Is insuring over 2,200 country elevators for over \$9,000,000. For conditions to unite with them, write

**C. A. McCOTTER, Secretary.**

## Millers' Mutual Fire Insurance Association

Of Illinois

ALTON, ILLINOIS

Established 1878

Insurance on Flour Mills and Elevator Properties.

Cash Assets - - \$366,891.05

A. R. McKinney, Sec'y

## MILL OWNERS'

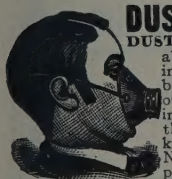
## Mutual Fire Insurance COMPANY

DES MOINES, IOWA  
Organized 1875

Insures Mills, Elevators, Warehouses and contents

Net Cash Assets ..... \$261,480.33  
Losses Paid ..... \$1,473,780.50  
Saved to Policy Holders .. \$1,909,196.60

**J. T. SHARP, Sec.**



**DUST! DUST! GIBBS DUST PROTECTOR** is invaluable to operatives in every industry where dust is troublesome. It has been thoroughly tested for many years in every kind of dust, and is the most reliable protector known. Perfect Ventilation. Nickel-plated protector, \$1. postpaid. Circular free. Agents wanted. **GIBBS RESPIRATOR CO., "B" 124 East Ave., Oak Park (Chicago), Ill.**

ROCKFORD

**Address** ROCKFORD ENGINE WORKS  
Dept. 7 Rockford, Ill., U. S. A.

The **ELEVATOR ENGINES** will please you.

From 2 to 30 H. P. any style. Write for special price.

**NEAT—NOBBY—HANDY**

ROCKFORD

## Robinson Telegraphic Cipher Revised Edition

Cloth Binding ..... \$1.50  
Leather Binding ..... 3.00

**MITCHELL BROS. CO.**

315 Dearborn St., Chicago

## Millers' National Insurance Co.

205 LA SALLE STREET

CHICAGO - - ILL.

CHARTERED 1865

Insurance with a maximum of security at a minimum of cost for **ELEVATORS, WAREHOUSES and CONTENTS**, on the Mutual Plan.

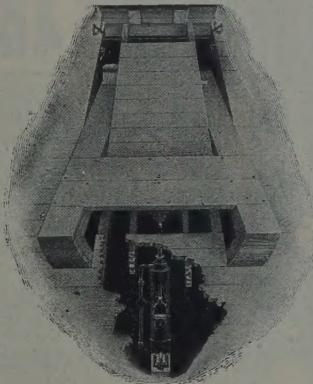
Five-Year Policies or short term policies on grain, if required.

Semi-Annual Assessments costing about one-half Stock Company Rates.

No conflagration hazard.

Gross Assets ..... \$5,288,714.18  
Net Cash Surplus .... \$930,166.99

## Reliance Automatic Dump Controller



This device is the only Automatic dump controller on the market that requires neither hand nor power to operate.

It causes the dump to settle down easily without the least jar or jerk and prevents accident to wagon or team.

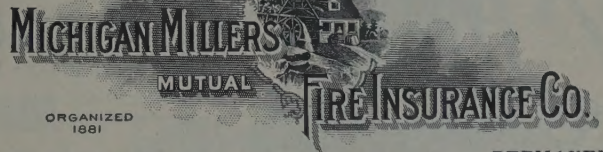
This device is a small cylinder filled with cold tested oil in which travels a piston which is attached to the front end of the dump. The motion of the dump is controlled by the forcing of this oil through a regulating valve, which can be adjusted to suit operator.

Equip your dumps with them and avoid accident in the handling of the coming crops. Shipped on trial to responsible parties. Write us for particulars and price.

**RELiance CONSTRUCTION CO.,**

625 Board of Trade Building, Indianapolis, Ind.

## THE OLD RELIABLE



INSURES ELEVATORS AND GRAIN

LANSING, MICH.

PERMANENT OR SHORT TERM POLICIES

## ELEVATORS

AND CONVEYERS

FOR

## GRAIN

We design and build **MACHINERY** of the most efficient and economical type for handling grain.

Let us figure on your requirements in this line.

SEND FOR CATALOG D-80

**THE JEFFREY MFG. CO.**

COLUMBUS, OHIO

NEW YORK PITTSBURG BUFFALO CHICAGO ST. LOUIS KNOXVILLE BOSTON DENVER MONTREAL, Can.



WANT ADS in this paper bring results. Rates on application.

## LEWIS GAS ENGINES

ALWAYS FILL THE BILL

Starts without cranking. Patented features make it more durable, smoother running, easier working than ordinary engines. Automatically adjusts itself—a light impulse for light work—powerful impulse for heavy load—saving fuel, wear and tear. Sold for twenty years. Thousands in use. Tell us what you will use it for and we will recommend size and give price.

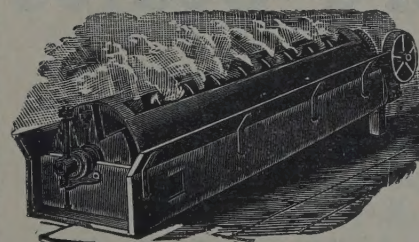
WRITE TO-DAY

**J. Thompson & Sons Mfg. Co.**

Dept 11, BELOIT, WIS.

CHAIN BELTING FOR EVERY MACHINE. WRITE FOR LOW PRICES. **THE C.O. BARTLETT & SNOW CO. CLEVELAND, O.**

SEE THAT YOUR CONTRACTS CALL FOR



SOLD BY ALL MILL FURNISHERS

Not an Experiment. In successful use 25 years drying CORN MEAL and HOMINY.

BREWERS' GRITS AND MEAL, BUCKWHEAT, RICE AND ALL CEREAL PRODUCTS.

ALSO SAND, COAL DUST, GRAPHITE, CLAY AND ORES

Automatic in operation, requiring no attention. Double the capacity of any other Dryer sold for same price.

**THE CUTLER CO., North Wilbraham, Mass.**  
CATALOG ON REQUEST

## Don't Buy Gasoline Engines

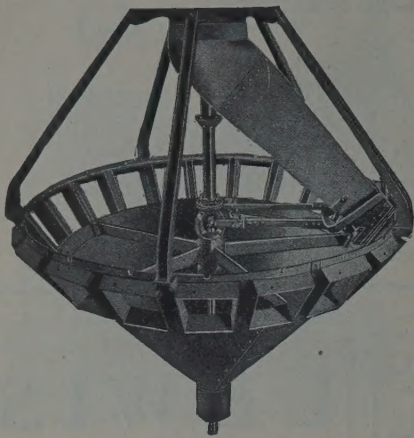
space occupied and practical overcoming of vibrations. Costs less to buy—less to run. Send for Catalogue.

**THE TEMPLE PUMP COMPANY, Manufacturers.**

until you investigate "The Master Workman," a two-cylinder gasoline, kerosene or alcohol engine, superior to any one-cylinder engine; revolutionizing power. Its weight and bulk are half that of single-cylinder engines, with greater durability. Endorsed by the Board of Underwriters. Especially adapted for grain elevator work, owing to steady pull, quick and easy starting, small

Meagher and 15th Streets, CHICAGO





### What Distributor?

**NO DISTRIBUTOR** can be perfect that mixes grain every time a bin fills, or that compels you to leave 1-10th unfilled, to prevent mixing.

If you have 10 bins you are practically making one of them useless by using a cheap distributing spout.

1-10th of your elevator capacity has cost you a bit of money and you need the capacity.

A poor distributing spout is a mighty expensive experiment, if you stop to figure.

## Hall Signaling Non-Mixing Distributor

fills every bin *chock* full including the bin spouts and never mixes a kernel, making available every inch of capacity of every bin and of all the spouting.

This is all accomplished with perfect accuracy, from the working floor, without ever visiting the cupola, and it adds 1-10th or more to your available storage capacity. You get as much grain in 9 bins as you ordinarily do in 10.

Our Booklets explain this feature clearly and others equally important.

**HALL DISTRIBUTOR CO., 506 Ramge Bldg., Omaha, Neb.**

## GURNEY Standard Scales

The great majority of the elevators throughout the Canadian Northwest are equipped with Gurney Scales.

Also found in terminal elevators in Halifax, St. John, Quebec, Montreal, Sarnia, Midland, Fort William, and a recent order was for the complete scale equipment (ten 2,000-bushel hopper scales) for the Grand Trunk Pacific Railway elevator at Fort William.

**Write us for Estimate on Your Scale Equipment for Delivery Either in Canada or United States**

Scales of every description, including the best type of Automatic scales.

**THE GURNEY SCALE CO.**

Established 1856

Hamilton, Ont., Canada.

MONTREAL

WINNIPEG

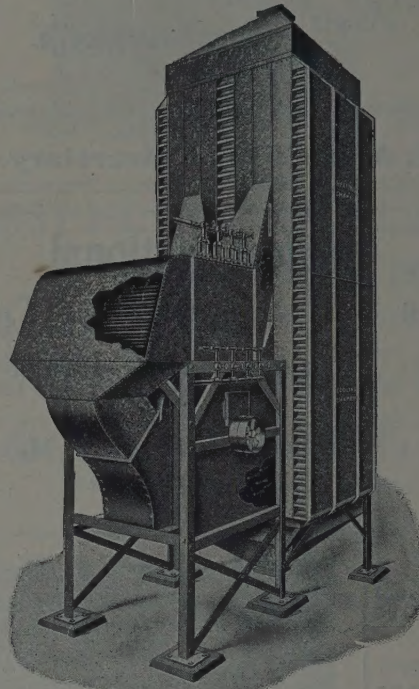
CALGARY

VANCOUVER

## HESS = DRIED

IS

## Best Dried



HESS GRAIN DRIERS are used everywhere, by Grain Handlers, large and small.

We make small sizes for country elevators and large ones for terminal elevators; eight regular sizes in all.

No. 3 Ideal HESS Drier and Cooler.

The Car-load a Day size.

*Send for Booklet.*

**Hess Warming and Ventilating Co.**

910 Tacoma Bldg., CHICAGO.



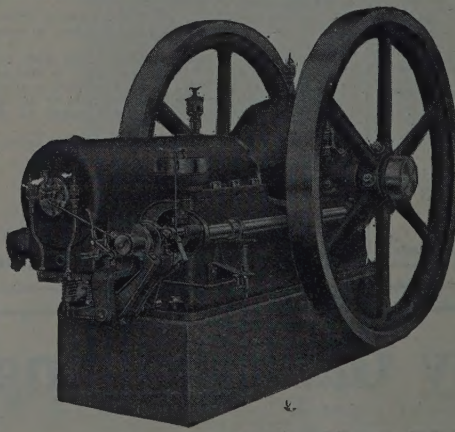
### 4 GOOD POINTERS

ON THE  
**Willford Three-Roller Feed Mill.**

- (1) It is Easy to Handle.
- (2) It is Strong and Durable, but Simple.
- (3) It will Grind the Most Feed with the Least Power.
- (4) It can Always be Relied Upon.

Write for Circulars and Prices.

**WILLFORD MANUFACTURING CO.,**  
303 3d St. South, - MINNEAPOLIS, MINN.



## The Field Engine

### Important Features

All Engines equipped with Automatic Starting device. Igniter points may be cleaned and speed of Engine changed without stopping and without handling any moving parts. All Valves and Igniter are mechanically operated. There are no water packing joints on the FIELD through which water can leak into the cylinder. All engines are constructed to carry a compression of 70 lbs. on gasoline, 100 lbs. on gas and 140 lbs. on alcohol, insuring the highest efficiency. We have eighteen distributing points in the United States. Catalog No. 60 gives other features of exceptional merit. Your postal will bring it.

**THE FIELD-BRUNDAGE CO.,**  
Jackson, Michigan